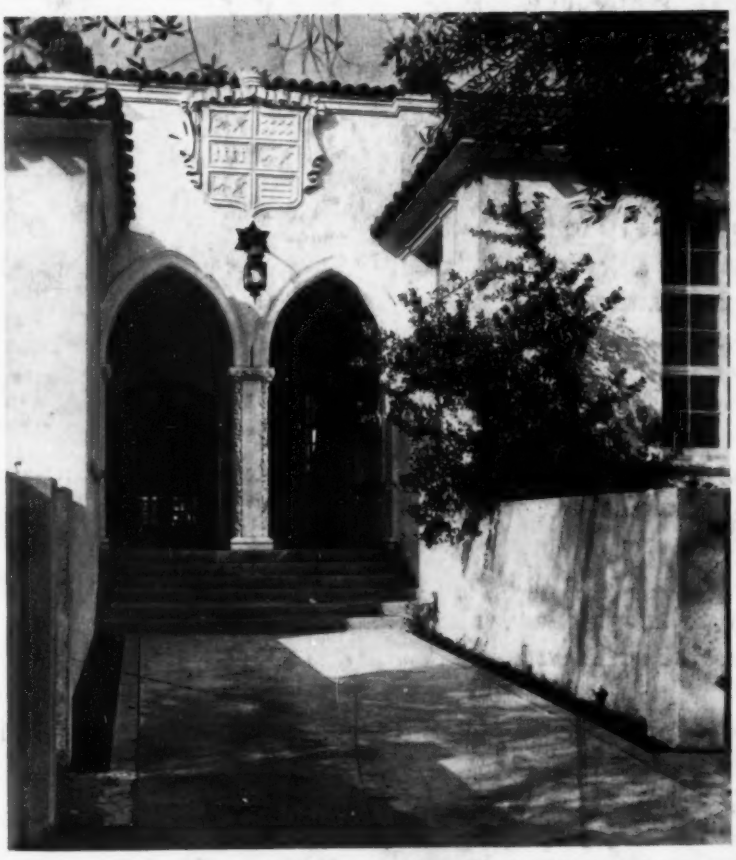
# The NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF RESEARCH TO THE BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS



MAY
1931

VOL. VII
No. 5

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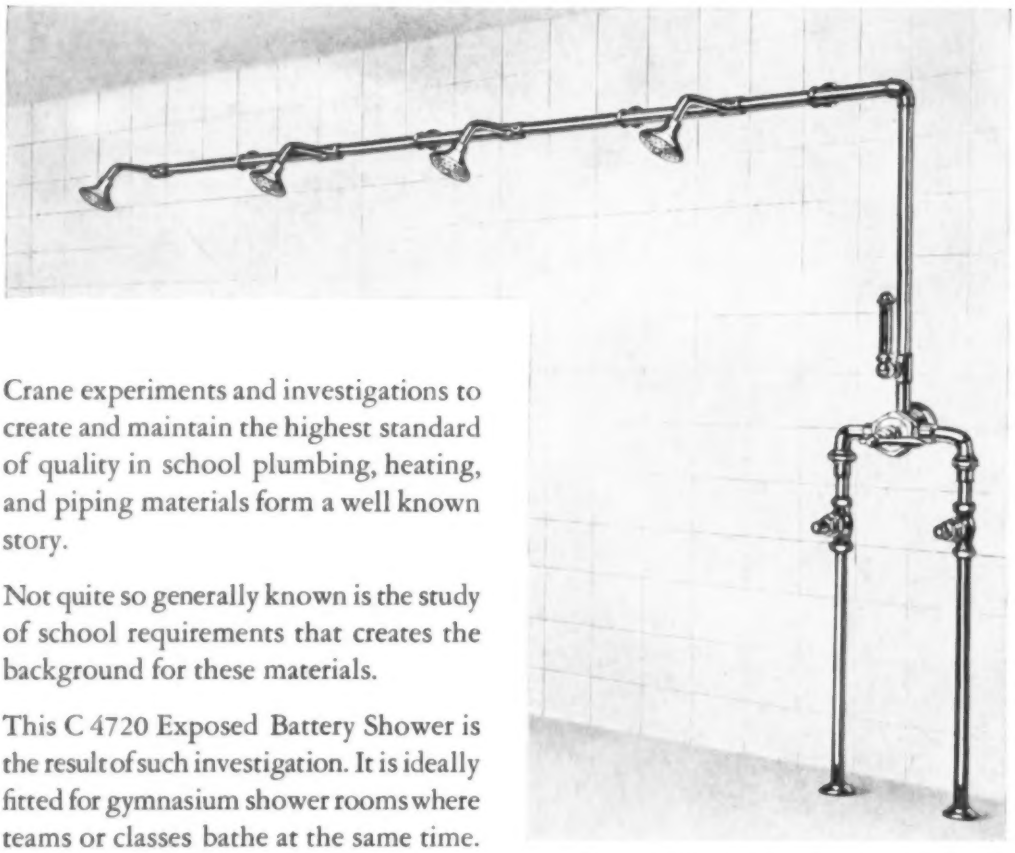
# Behind Crane school materials
## *lies careful study of requirements*



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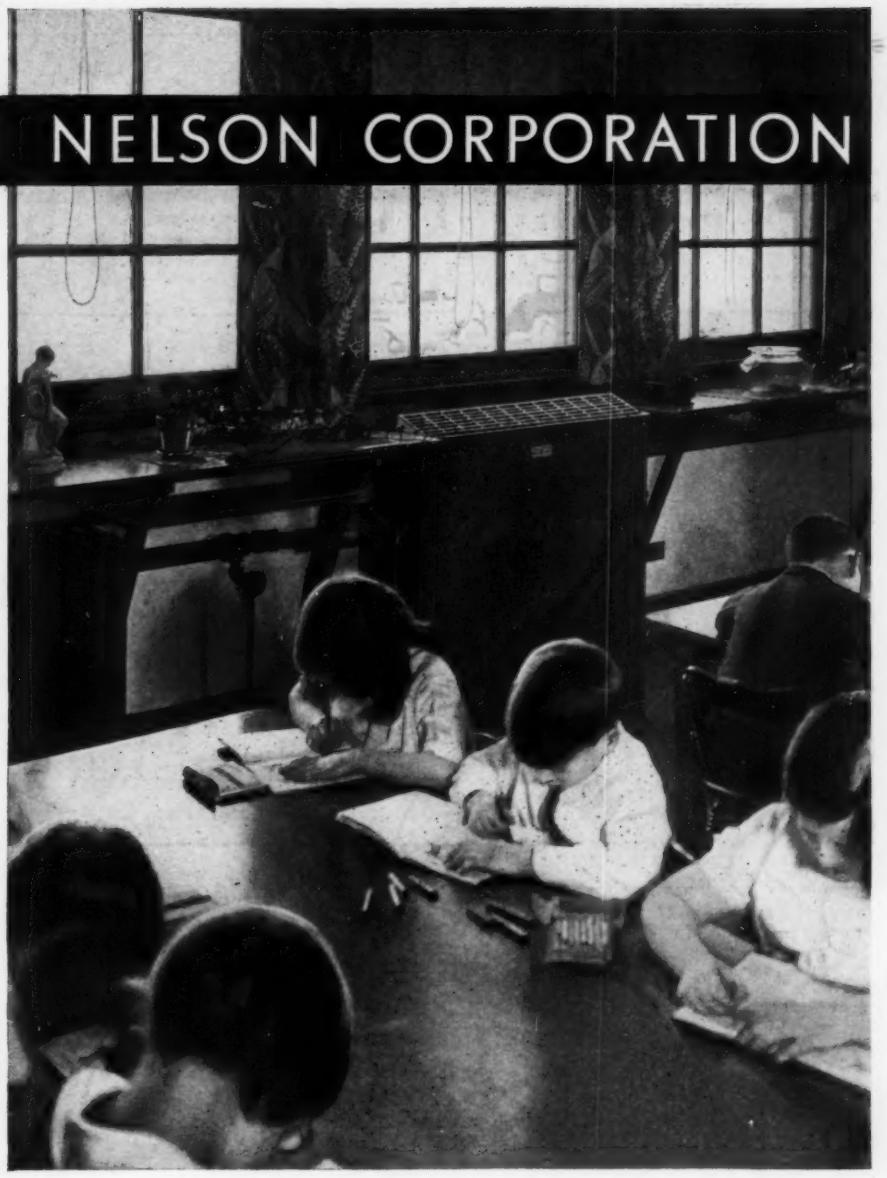

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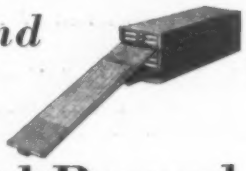

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*Right*—Car-Na-Var preserves and beautifies tile and linoleum floors in plant of Eli Lilly & Co., Indianapolis, Indiana, Manufacturers.

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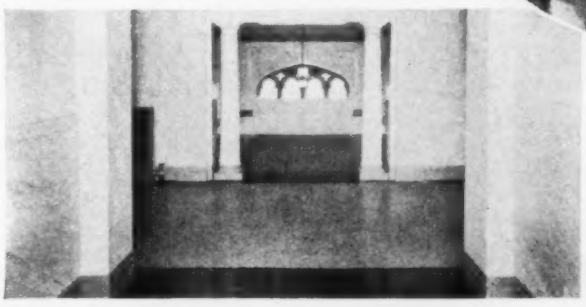

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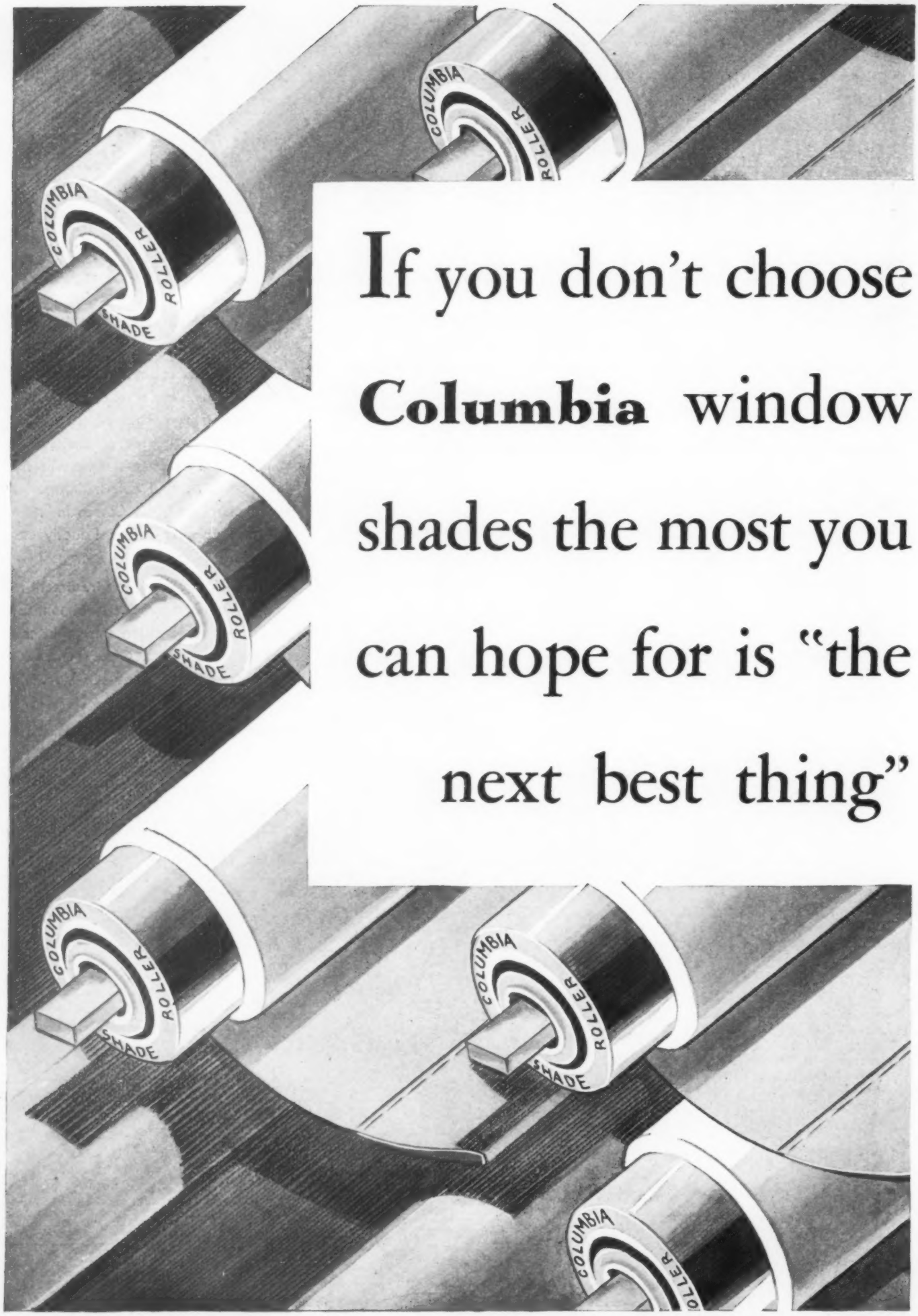


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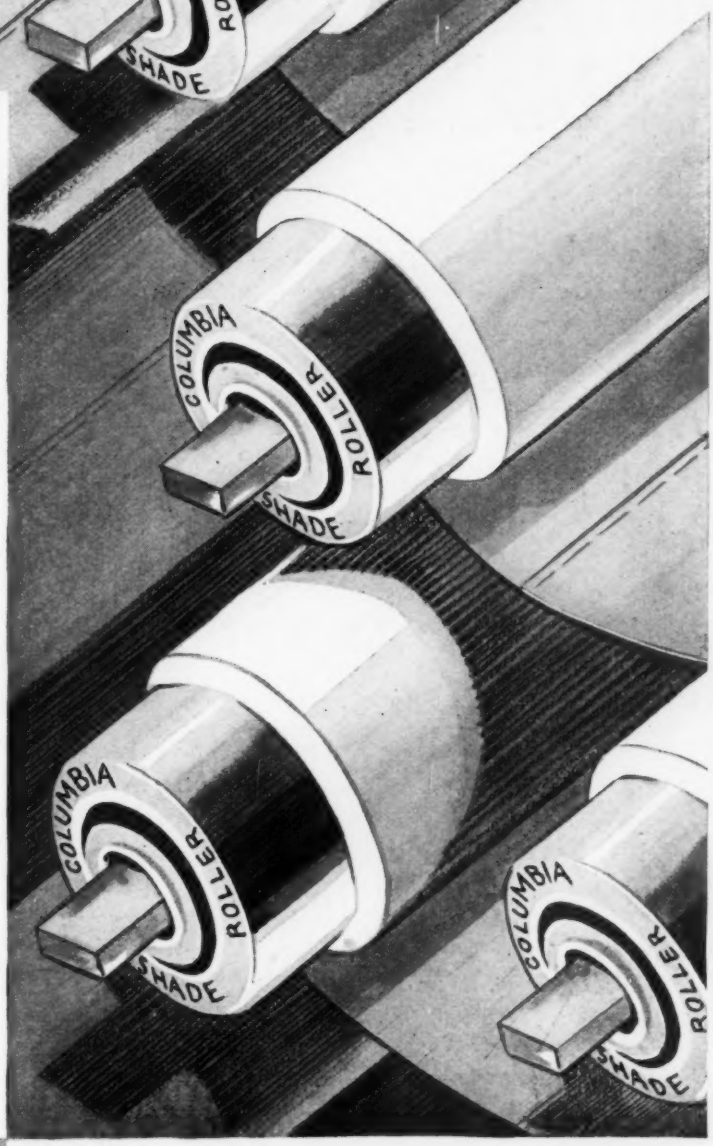


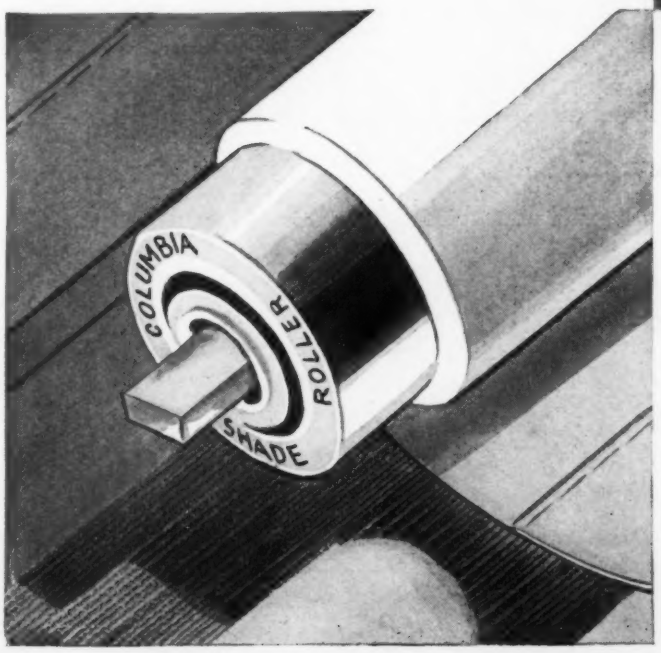


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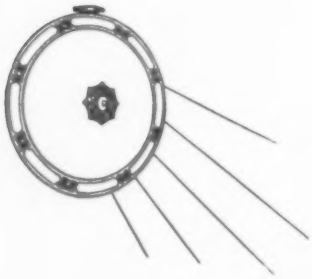

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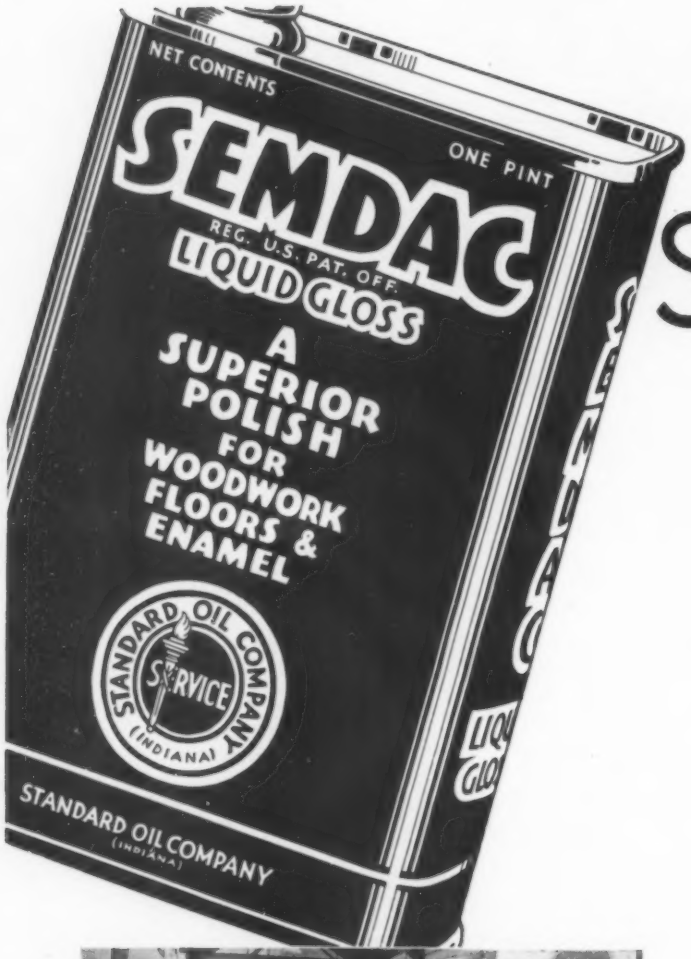


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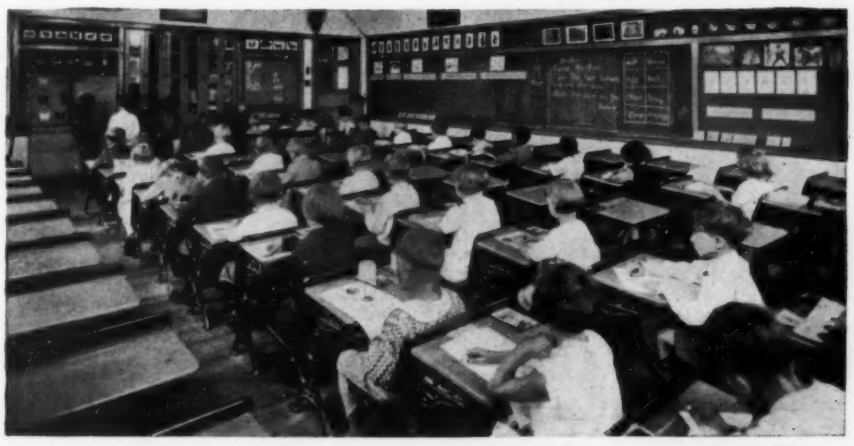

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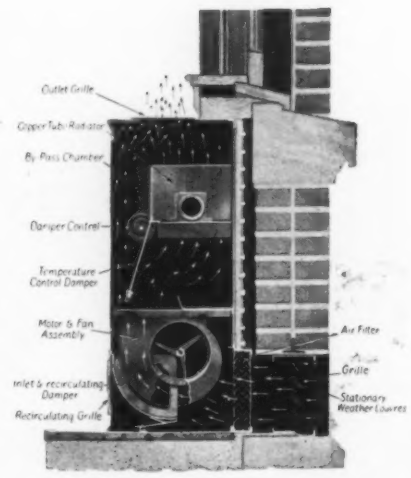

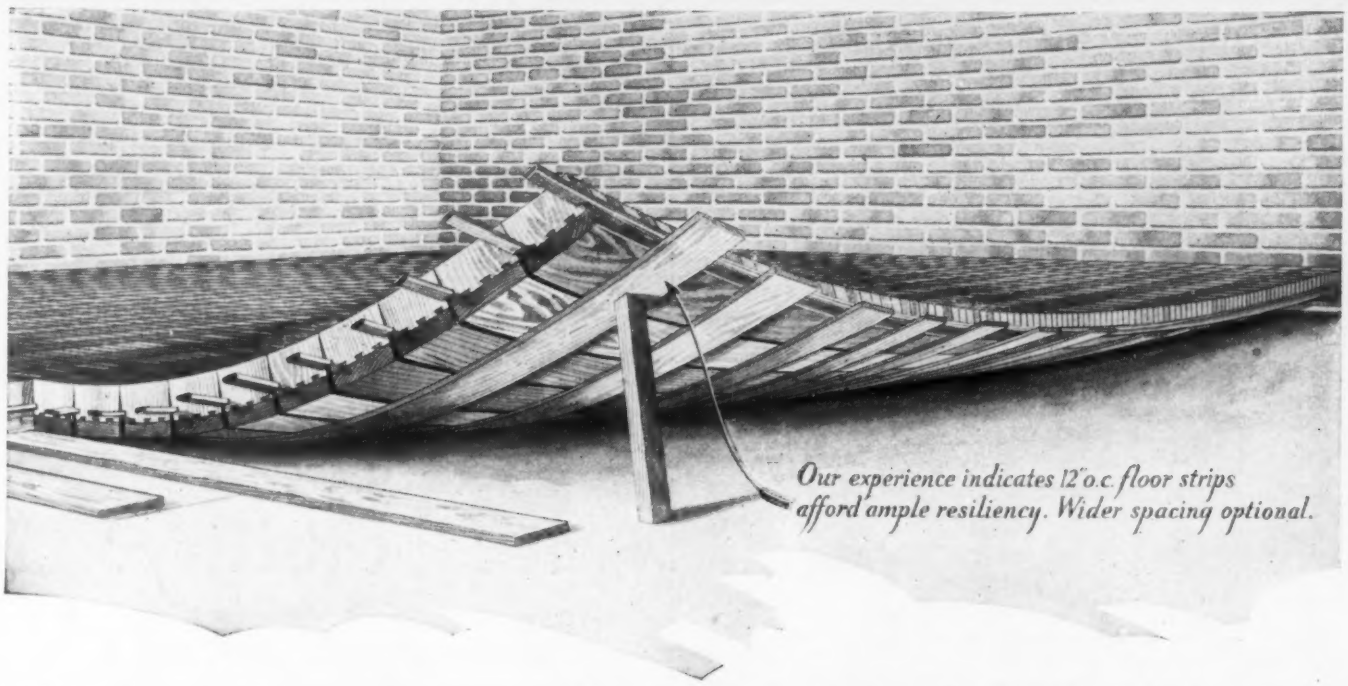


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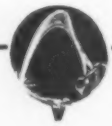


The
NATION'S SCHOOLS
DEVOTED TO THE APPLICATION OF RESEARCH TO
THE BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

VOLUME VII MAY, 1931 NUMBER 5

# New Objectives for a Vocational Guidance Program

*The schools must discard worn-out methods and obsolete courses if they are to keep pace with the developments that are rapidly taking place in industry*

By C. R. REED, Superintendent of Schools, Minneapolis

EDUCATION has always aimed to provide the learning that is essential to the stability of social institutions, and at the same time to teach those skills that are necessary in the earning of a living.

Rapid changes in industry during the last fifty years have left the schools bewildered and have created a necessity for guidance. Tremendous changes have also taken place in our economic and social structure. The school has attempted to keep abreast of these changes by preparing children for social efficiency. The breakdown of the apprenticeship system was met by the introduction of trade training. With the coming of the machines, many social and industrial maladjustments appeared. In many cases schools were found to be teaching trades that did not exist, or else teaching them in a different form from which they were practiced.

Just as the physical machine has displaced hand labor, the business machine has displaced brains. We have group medicine, great law firms, chain stores, chain banking. And in each of these organizations there are a few larger and better jobs at the top that are filled by men of great ability. But the tendency is distinctly to lower the standard for minor executives and to convert them from leaders to cautious job holders.

A youth to-day when he goes out into the business world is likely to find a job that has the work already mapped out for him. He is not expected to make mistakes and to profit by them. He is expected to do his work largely as he is told to do it. Business is more interested in dividends than it is in developing personality. In attempting to adjust itself to these changes the school system has multiplied its activities and has constantly increased its responsibilities.

Some of the difficulties in the coordination between the schools and industry are due to the characteristics of the teaching profession. Teachers have always been a conservative group, interested in transmitting the culture of the past to oncoming generations. They have undergone a long period of specialized training, and in a field quite remote from business and industry. The necessity for continual study leaves teachers little opportunity for first-hand contacts with industry. Teachers deal with children only, and are quite removed from contact with members of other professions. They are in the habit of having their decisions accepted without question.

It is also true that the leaders of business and industry are ignorant of the conditions in the modern school system. They do not realize that schools have changed as much in the last twenty-five years as have factories or stores. They do not under-

stand the terminology or techniques characteristic of the modern school procedure. They do not realize the contribution that education is making to modern business prosperity.

The guidance movement is to-day the most important factor in closing the gap that exists between the school system and industry. Guidance is the function of the entire school system, including all of the activities in the schools that may be helpful in assisting the individual to choose, make preparation for, enter upon and make progress in an occupation. While it requires a definite organization, it is the responsibility of the whole school system. Guidance includes child accounting and testing, classes in occupation, occupational studies, counseling activities with groups and individual children, placement and follow-up studies with those young people who have left school.

### *Schools Must Keep Pace With Industry*

A well organized and efficient system of guidance will constantly interpret industry to the school system. The general policies of the schools must be influenced by changes in industrial life, and the school system must be intelligent with regard to these changes. A recent study shows that 60 per cent of the discharges from jobs are due to a lack of social understanding on the part of the job holders. This would indicate that courtesy and those personality traits that promote social effectiveness are much more important in comparison with specific skills than the schools have realized. The modern tendency for large corporations to place more emphasis upon the health of employees and to require physical examinations regularly indicates that the school system should place more emphasis upon physical education and training in health habits.

### *Too Much Stress on Specific Skills*

Our study of the junior high school withdrawals in Minneapolis indicates that the school system has been placing too much stress upon specific vocational skills for those pupils who are forced to leave school early, either because of economic necessity or because of a lack of success in school work. Our study shows that 75 per cent of the junior high school withdrawals find jobs that can be learned in less than a week. The introduction of machine processes is changing the type of job so rapidly that it is becoming increasingly important for these young people who leave school early to understand industrial conditions and to have a more general education leading to better social adjustment rather than specific trade training. An efficient guidance program can suggest more specific modifications in the curriculum that become necessary as a result of industrial conditions.

Our Minneapolis survey of high school graduates shows that many more high school graduates took positions in offices and stores than went to college. It was especially interesting to note the number of boys who were entering offices in clerical positions. These facts suggest a need of modifying the curriculum to offer these boys more specific training for office work, possibly stenography, typewriting, filing and the operation of office machines. In this case it may be necessary to place more influence upon special skills and less upon general training.

The present practices in telegraphy show a need for modifying the vocational school course in this subject. There is little use of the Morse code at the present time in telegraph offices, which indicates the need of training young people who are preparing for this line of work in the use of a typewriter or in the use of the telegraph machines that are actually used in these offices.

### *The Value of Occupational Research*

In Minneapolis our work in occupational research has already definitely brought about some changes in the curriculum as a result of changes in industry. During the past year we have established a course in upholstery in our boys' vocational school as a result of a study of the conditions in that trade in our city. We have made some important changes in our course in auto mechanics, one of which is the lessening of the requirement in mechanical drawing. Our counselors are now recommending a course in watchmaking for the vocational school since that industry is becoming more and more important in Minneapolis.

Not only is it necessary to interpret the schools to industry, but it is necessary to interpret industry to the schools. The vocational guidance department can do a great deal to bring about a better understanding of the schools on the part of industrial leaders. Much of the misinformation that business men have concerning the schools is based upon misunderstandings. An employer hires a pupil with a poor scholastic record on the basis of the pupil's appearance and places him in a position that requires unusual ability. When the young man fails, the employer will criticize the school for turning out a poor product. As a business man, he would not expect his poorest grade product to command the highest price or to satisfy his most particular customer.

Our school placement department, with its complete records of the school achievements of pupils, can place young men and women in positions for which they are best suited, and can in most cases satisfy the employer and reduce misunderstanding

and criticism. The placement department is also valuable as a clearing house for complaints.

Occupational research as a part of the guidance program provides an opportunity for valuable contacts between business men and the school system. The Minneapolis department of guidance recently made a study on architecture. A committee was formed which included the president of the local society of architects, representatives of the school guidance department and a representative of the architectural drawing department. This committee met on several occasions and discussed the demands of the profession and the training the school should give to satisfy those demands.

### *Promoting Good Will*

The industrial trips our pupils have been taking under the supervision of the guidance department have been a means of enlightenment to business men. They see groups of intelligent, alert pupils studying industrial conditions as they actually are, and they realize the sincerity with which the schools are endeavoring to prepare boys and girls for industrial participation.

A better understanding of the school system has been brought about by the Kiwanis Club, which has cooperated with the schools by providing speakers to discuss the various occupations with groups of pupils in the schools. This cooperation has helped the schools, and at the same time has been effective in giving business men information concerning the school system.

Our experience in Minneapolis indicates the value of continuous follow-up studies. A business organization is continually testing its product by means of laboratory methods, by sales volume, by consideration of complaints, by watching the product in competition with other similar products. Schools have been relatively unaware how the product was distributed or how successful it is. The results are often so far removed from the instruction that little effort has been made to check on the product of the school. There are difficulties in this type of study due to the impossibility of controlling such factors as native intelligence, home background, personality traits and industrial conditions. If such studies were carried on over a period of years, however, it would be possible to get results that could take cognizance of these different factors.

### *The Working 70 Per Cent*

Our study of high school graduates shows that only 30 per cent go to college, which makes it necessary that we give more thought to the 70 per cent who are plunging directly into industry or business and give these young people a course that shall not be too much influenced by college entrance requirements.

Our studies show that dull pupils who withdrew from junior high school are often much more successful in industry than they were in school. The training they receive in junior high school would be a preparation for life rather than a preparation for senior high school. It is not fair to allow these pupils to leave school with a sense of failure because they have been judged by academic standards entirely and often given tasks quite foreign to their interests and too difficult for them.

A well rounded intelligent guidance program will interpret industry to pupils and prepare them as individuals to take their places in the occupational world. Such a program should help boys and girls to see the broad range of occupations open to them. They should develop an intelligent attitude toward vocational choices. The choice should be the pupil's and not somebody else's. Counselors should stimulate each pupil to do his own thinking about these problems. The best kind of guidance is that which lays the foundation for intelligent self-guidance. We should try to provide experiences either in school or out of school which will give a background for making occupational plans. It is probable that successful postschool adjustments depend to a greater degree upon an understanding of industrial conditions than upon specific skills.

### *Helping the Pupil to Find His Niche*

Should our curriculum in junior high school include a study of the industrial revolution with its present implications and probable outcome and the manner in which it affects the life of workers? Counselors can reduce economic waste and personal unhappiness by reducing the maladjustment of individuals in occupations. Too many pupils without ability are going to college and too many girls who should go into factories are seeking jobs in offices. Sympathetic, personal relationships between the counselor and individual pupils can do much toward reducing the waste that is caused by this situation, and guidance can do much toward discovering the potential leaders of the next generation.

The greatest problem the schools are facing is the discovery and training of those who have the ability and character to lead. A contribution to a solution of this problem can be made by discovering pupils of unusual ability, by seeing to it that their curriculum is rich and well fitted to their needs and by stimulating these individuals to the point where they believe in their own possibilities and are willing to prepare themselves to fill positions of responsibility.

# Where Standardization Practices Are Rejected

*Breaking up the lockstep in the promotion of pupils may be said to be the basis of the progressive program in effect in the schools of Montclair, N. J.*

By FRANK G. PICKELL, Superintendent of Schools, Montclair, N. J.

THE Montclair program represents an honest attempt to put into practice educational theories that are generally accepted but sparingly used. The methods described in this article are based upon the work that is being done in the elementary school and for the most part in the primary grades.

Some persons may argue, as did one prominent educator, that the Montclair program would not work in the average industrial city; that it would be unsuccessful with any but selected pupils, thus saying, in effect, that such practice must be confined to schools that can select their student group from among those who have a high mentality and a rich background of home life. It may be more difficult to hold classes down to a reasonable size in other types of cities. It may be more difficult to obtain adequate equipment and supplies than it is in Montclair. But the superintendents of this country make a mistake when they argue for the dollar against the interests of the country's future citizens. They are merely puttering around when they seek to standardize all supplies and cut them to the limit. As an example, the Montclair budget for 1931-32 amounts to $1,375,761, and of this amount only $40,000 is set aside for supplies, so that the most deadening of standardization routine could effect so slight a saving that it would not be worth while even from the standpoint of dollars and cents, to say nothing of cramping the educational program and making teacher initiative wellnigh impossible.

Montclair, commonly known as the Mountain Town of Northern New Jersey, is an unusually attractive residential city. It is about fourteen miles from downtown New York City, and is one of the suburban cities of the metropolitan district, with a population of 42,000. While many of its citizens are daily commuters to New York, yet it has flourishing service clubs, extraordinary women's clubs, housed in their own commodious buildings, an active chamber of commerce, and many of the other organizations one would expect to find in more isolated cities of equal size. The chief business is local retail selling. There are no large industrial plants.

Montclair, which lies on the eastern slope of the First Watchung Mountain, is a city of beautiful homes. The houses, as a general rule, are set back a distance from the street. Few places can boast of more spacious or attractively landscaped grounds. Widespreading trees arch their graceful limbs over the sidewalks and streets and add an air of beauty and quiet dignity and distinction. Many persons noted in science, art, music, literature and finance live in Montclair. But the majority of the population is made up of citizens who daily go about their work, without the plaudits of the world, and rear their families in modest homes. Montclair also has its needy cases and its cases of social maladjustment for the care of which there has been developed a program of social service.

### *Program Deals With All Groups*

These facts are stated largely to give, first, an honest description of the character of Montclair's population and, second, to show that the school program cannot be criticized on the ground that we are working entirely with a highly selected group of children. The program is in effect in all of our schools, regardless of the type of the pupils.

On the whole the citizens are progressive in spirit, well educated and deeply interested in the cultural things of life. They believe in progressive education sufficiently to support their schools generously. The public school enrollment reached 7,217 on November 1, 1930. The assessed valuation for 1931 is $112,206,891, or in round numbers $15,500 for each child on the public school rolls on November 1. As previously stated the school budget for 1931-32 for current expenses, exclusive of debt service, amounts to $1,375,761. Compared with other cities of the United States, both large and small, this budget at once shows that few cities spend more per pupil for educational purposes. The parents do believe in their schools.

Yet it is not the amount of money available that makes the Montclair program possible. Such an assumption leaves out of consideration the philosophy back of such a program. Available money, in itself, is not a guarantee of progressiveness in education. An imaginative mind will do much to overcome monetary deficiencies. Once in another city it was my good fortune to visit one of the most remarkable classrooms I have ever seen. The teacher was thoroughly convinced that children are best and most effectively taught in a natural, laboratory atmosphere. The board of education could not or would not supply movable furniture and a sufficient quantity of materials. She found a way of

*While one group of pupils has a reading lesson, the rest of the class is engaged in various activities—clay modeling, a number game, reading, painting and cutting letters.*

having tables built for the pupils. She obtained lumber and built a number of the things needed in her instructional program. She found an old work bench and obtained by one means or another a set of tools. As a result the children have a distinctive and beautiful room and one they will not soon forget. Imagination, initiative and resourcefulness will go far, if they have some slight encouragement to give them a start.

### *Utilizing the Child's Natural Acts*

We think of a garden as a place in which things are encouraged to grow. We may till the soil, fertilize it and do all sorts of things to make growing conditions right, but the plants do all the growing. The gardener cannot do it for them. Our school program, premised upon this thought, begins in the kindergarten. We try not to forget that the children do the growing, and that the teacher should make conditions as propitious as possible. Our kindergartens cover a two-year period, and the schools are encouraging the organization of experimental, privately controlled, nursery schools. There are several such schools in Montclair.

"Education," says Hosea Ballou, "commences at the mother's knee, and every word spoken within the hearsay of little children tends toward the formation of character." In a more modern sense, it could also be added that everything a little child does tends also toward the formation of character and is perhaps a more potent factor than the spoken word. So the Montclair program encourages a plan of education based upon child activity, and tries to utilize what children naturally do, for educational ends.

### *Free Floor Space an Essential*

Attention should be called to the amount of free floor space shown in the accompanying illustrations of classroom work. Informal teaching and group or individual project work are greatly handicapped if the room is filled with furniture. It is almost an impossibility with fixed furniture. In a class in which the teacher does informal work there should be a minimum number of pupils' desks. Such a room should be equipped with movable furniture. There should be only enough desks to seat about one-half the number of pupils, and there should be a chair for each pupil. Some of the desks or tables should accommodate one pupil and not more than two pupils; others should be larger to provide for group work. In addition, the room should be supplied with a library table, a sand table, one or more easels for creative art work, clay for modeling, a workbench and tools, science material, blocks for building, lumber (old goods boxes will do) and much of the equipment formerly thought to be appropriate for the kindergarten only.

Our experience with a few secondhand typewriters has convinced us that they also are interesting and effective instruments of instruction. A variety of books within easy reach of the children should be available. The little bookcases can be made by the pupils themselves if no appropriate storage place is otherwise provided. A corner of the room may well be attractively furnished as a reading corner. The controlling purpose, however, is to leave a fair amount of the floor space available for group projects. When a room is thus equipped the teacher is at once confronted with the necessity of modifying her classroom technique. She must use the group or individual as the unit of instruction.

### *The Teacher a Leader, Not a Tyrant*

In a typical room, such as one of those illustrated, we are at once impressed with what is going on. Sometimes the visitor's first impression is that there is nothing but confusion in the room. The pupils are working in small groups. One group is at the sand table; another is before the easels illustrating a poem; another is drilling its members in reading; another is busy at the workbench contributing its share toward the completion of the project that grew out of a visit to one of the model dairy farms. Still another small group is doing handwriting, while the pupils seated in chairs arranged in a circle are reading. A library group is at work in the reading corner preparing stories to tell to the other members of the class.

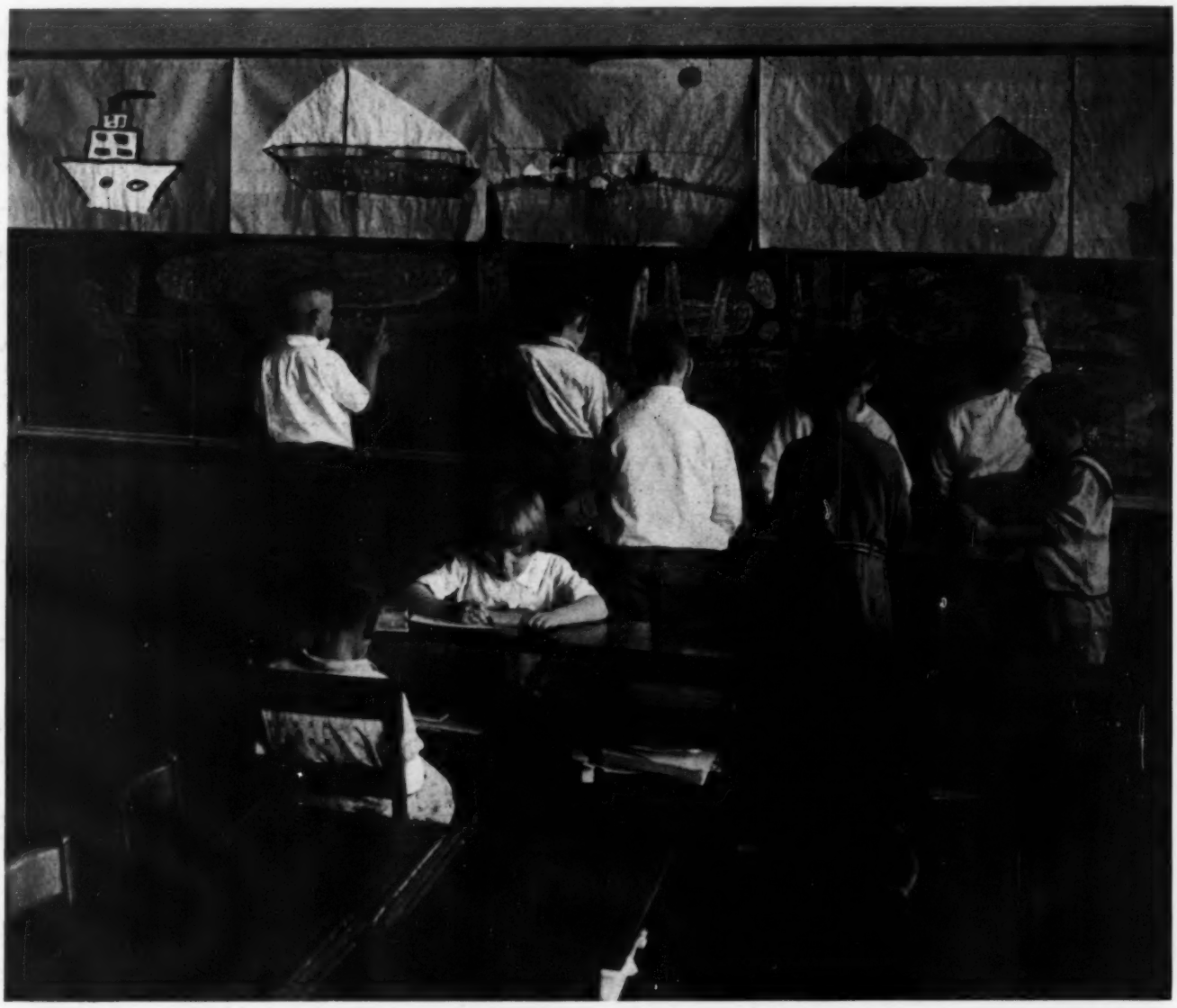
What is the teacher doing? She is directing all of these activities and giving help where and when it is needed. In such a class the children are doing things because they want to do them. The atmosphere is conducive to whole-hearted interest and willing participation. There is a world of difference between the situation in which the child reads or drills himself in arithmetic because he feels that he should, and that situation in which children work because the teacher requires it. The former is the natural method, the latter is about as artificial as the human mind could invent. If it could be made more artificial, there are those who would make it so.

All this calls for greater leadership qualities on the teacher's part, than does formal teaching where the work does not begin until all "pupils sit up straight with feet out of the aisles." It calls for a new kind of daily program. Instead of definite subjects scheduled for fixed small parcels of the school day, the program recognizes the interrelation of subjects so that the daily schedule becomes simple in that subjects are run together. The teacher should have a flexible program, so that

as the occasion requires it, more or less time can be spent on a given subject without disrupting the program.

Under such a plan social science or reading or any other subject can be given all the time necessary to carry out important projects or to provide drill. Excursions can be arranged out of which the most natural of teaching situations may be developed. Our Montclair children visit the dairy farms, truck gardens, go to the parks on science trips and so on, and then these trips become the basis of class or group projects. The flexible program makes all this easily possible. Then, too, such a program makes the free period not only a possibility but a necessary and important part of the day's work. In these periods the group work gives motive and adds zest and interest to what comes in the drill and skill periods under the teacher's direction. It is in this free type of activity that the pupils soon realize that if they are to keep pace with their group they must be able to carry their share of the work.

A progressive school deals with children as individuals. Before a teacher can work effectively with a pupil as an individual, she must know certain facts with respect to the pupil's behavior, his physical condition, interests, experiences and mental capacity. Just as in the garden we should count the gardener foolish who would plant the tomato vines two inches apart and drop one single radish seed to each two feet in the row, so should we look upon that educational program which puts into the hands of the third-grade teacher a course of study calling for certain definite standards and then expects her to forget that children are as different in their make-up, characteristics and possibilities as tomatoes and radishes in the vegetable garden. But why elaborate on this point? We have



*The children themselves have chosen the activities represented here. Some are drawing airplanes, some painting or reading and some modeling in the sand box. Everyone is working.*

volumes of experimental evidence on the subject at hand.

The Montclair program is based upon a critical diagnosis of each child. To this end each child is given a physical examination which includes a careful study of his vision and hearing. For this latter purpose the system has two audiometers, one for the kindergartners and one for those children who have learned to read. A complete psychologic and psychiatric clinic has been established. The children are tested for mental ability and also frequently for accomplishment. Their emotional problems are studied by the visiting teachers and the more troublesome cases are passed on to the psychiatrist. Each child in the kindergarten is given an individual mental test, and this information, together with that collected as to his physical condition, his maturity and other points, is used as the basis of pupil placement.

*Diagnostic Studies of All Children*

Diagnostic studies are made of all children in the elementary grades. The type of diagnosis and study made of the pupils will be made clear from the kindergarten card.

The kindergarten card calls for a study of the child in relation to activities under the following heads: shows variety of ideas; shows interest in the development of his ideas; expresses self through singing, appreciation of music, rhythms, language, dramatic play or through materials such as clay, paint, wood, cloth, blocks and toys; shows satisfaction in accomplishing; shows skill in use of materials; shows reading readiness, as an outgrowth of ideas and expression of ideas in that he has wide experiences, has many ideas, speaks with ease, has a large speaking vocabulary, enunciates well, shows eagerness to read.

The child's behavior in relation to the group is studied as follows: attempts but cannot make social contacts; makes social contacts only when absorbed in activity; initiates social contacts; influences others to cooperate; shows qualities of leadership; is ready to follow; finds satisfaction in achievement rather than in adult approval; makes good use of suggestions; adjusts with control when thwarted; follows necessary directions well; shows consideration of others; has acquired simple forms of courteous speech, as "thank you"; deliberately tries to attract attention; annoys others; accepts directions too passively.

Habits showing growing self-dependence are also listed: cares for own wraps and shoes; washes hands on appropriate occasions; takes proper care of own toilet habits; relaxes well during rest period; proper use of handkerchief; keeps hands away from face; covers sneeze and cough; clears up properly after work.

Physical conditions are checked: noticeably underweight (over 10 per cent); vision R—— L——; hearing R—— L——; prefers use of right or left hand; noticeably lacking in coordination; physical handicaps.

On the reverse side of this card the space is given over to the psychologist's findings, as follows: in contact with new activities—gives attention; understands directions; is alert; cooperates; persists; is easily discouraged; shows satisfaction

*This picture illustrates an individual work period in which the children plan and carry out their own ideas under teacher guidance.*

*Some of these busy pupils in their workshop—the schoolroom—are studying geography, while others at the map are getting an idea of the size of South America. The girl at the easel is painting animals.*

with success; spurred on by failure; is spontaneous; is painstaking; is self-reliant; in contact with one new adult personality—appears timid at first; continues to appear timid; responds to friendly advances; makes friendly advances; makes boisterous advances; is spontaneous in conversation; is repressed; seeks adult approval; is well controlled; is good natured; is officious.

### *How Speech Defect Cases Are Handled*

Space is also provided for recording speech defects and for the Stanford-Binet Mental Ability Ratings.

It should be noted here that children with speech defects are placed under the direction of a specialist in speech. Too much cannot be said for this type of service in public schools. Last year 279 cases of speech defect were handled by the speech teachers, and the defects ranged from pronounced foreign accent to stuttering and stammering. Of these, 105 were made normal in speech during the year and 129 others showed marked improvement.

Space will not permit a detailed account of the diagnostic cards that are used for the elementary grades. They are somewhat less elaborate than the kindergarten card but none the less searching. More space is given for recording the results of achievement tests given under the psychologist's direction.

Now, what use is made of all this information? That's the most important question thus far raised. Each fall the classes are made up on as nearly a homogeneous basis as possible. After the classes are organized as groups, the teachers are given the complete diagnostic story of each child. She knows what her human material is like, its degree of accomplishment and its apparent possibilities.

### *Training the Child Up to His Own Standard*

One point should be made clear, because of Montclair's attitude toward class grades and annual or semi-annual promotion and flexible courses of study. We do not believe that courses of study can be consistently made in detail in advance and then printed and handed to teachers to be followed. We believe that the differences in children require an

adaptation of the course and that no two class groups need exactly the same content or the same amount of drill. More than 100 Montclair teachers are each year working on courses of study, yet not a single course has been printed. They are prepared as outlines and purposely kept in stenciled form.

We do believe in standard tests and that children should be kept up to standard if they are capable of such attainment while in a given grade. We rather accept the viewpoint that the child should be kept up to the only standard possible for him—his standard determined by his own natural gifts. We prefer to accept standard tests as the goal of achievement to be attained in accordance with the child's capacity and without much reference to whether he is in the first or sixth grade. It ought not to be necessary to say again that some children in the first grade can read up to the so-called third or fourth or even sixth-grade standard, while some children who by physical maturity belong in the sixth grade probably never will read up to, say, the commonly accepted third-grade standard. We cannot leave the child out of the picture. Train him up to his own standard. We cannot accept as sound the general practice of insisting that all children in the first grade must be taught to read up to a certain standard or fail to be promoted. Some children are not ready for reading in the first grade, while others show a reading readiness in the kindergarten. In Montclair we do not worry in the usual sense over the traditional grade standards. In the end our pupils are well above the average for the country in proficiency in the tool subjects.

### *Should Grades Be Abolished?*

If this is accepted as sound, and surely it is, then the artificiality of school grades becomes at once apparent. Montclair has gone far enough now with this kind of work to consider seriously the proposal to abolish grades in the primary school. As for promotions, we promote pupils irregularly through the year at any time when the welfare of the child would seem to be best served by making the move.

*Taking part in work that is fun. Here we see the children making paper and twig trees for the sand table, taking part in library and individual reading and learning arithmetic at the blackboard.*

Some may argue that it requires specially trained teachers for the informal type of group work described and illustrated. It does, but not in the sense that one usually uses such an argument. Teachers who have the ability can, through an intra-system program of training, become as rapidly prepared as is good for the school system. We have consistently refrained from suggesting to any teacher that she should use the new plan. It has grown naturally and somewhat slowly. We have been five years developing this plan to its present stage. Much time has been spent in discussion and in interschool visitation. The work began with a few teachers here and there experimenting with the idea, and time was taken for study and development. Too many systems adopt a policy rather than grow one. This is shown by what happened to the socialized recitation, which had much good

in it. It was adopted by scores of cities and the teachers did not even know what it was all about. The good there was in the idea suffered from malpractice.

What of the stiff formal preparation for work in the junior and, especially, in the senior high school? Standard tests show that we have gained in proficiency rather than lost, and this would seem to be one more bit of evidence that Kilpatrick is right in his stand for whole-hearted participation. We believe we have come nearer to Kilpatrick's ideal through an informal, life laboratory scheme of teaching than is possible in teacher dominated and controlled class groups.

The spirit of the Montclair classrooms may be further illustrated by the work done in art. We believe in freeing the child to use his abilities. If he draws lets him use his imagination. His technique may be poor, his execution may be abominable when judged by the standards of the old-fashioned art teacher, but he is paving the way for a love of art and the happiness to be found in sensing and appreciating the beauty that skilled artists have left to mankind.

From experience we have found that not necessarily our most robust children, not necessarily our most intelligent children, but our most happy children and those who are free to use the fullness of their abilities, are the children taught by that teacher who believes with Kahlil Gibran:

"You may give them your love but not your thoughts,
"For they have their own thoughts.
"You may house their bodies, but not their souls,
"For their souls dwell in the house of tomorrow, which you cannot visit, not even in your dreams.
"You may strive to be like them, but seek not to make them like you,
"For life goes not backward nor tarries with yesterday."

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## Radio Sermons and Farm Talks Appeal Most to Illiterates

Reactions of illiterate people in listening to various radio programs were ascertained in a survey, the results of which were recently made public at the office of the secretary of the interior, Ray Lyman Wilbur.

In the choice of those who could not read or write, sermons ranked first in popularity, the National Farm and Home Hour, second, and business talks and news flashes, third, according to a report of the survey submitted by H. Robinson Shipherd, president of Lincoln Memorial University, Harrogate, Tenn.

Placing of radio sets in the homes of illiterates, the report discloses, stimulated in the listeners a desire to possess the sets. The Lincoln Memorial University report is based on a study of the effect of twenty-five sets placed at various locations within a radius of forty-five miles of the university. Additional information made available from the report follows:

Through the cooperation of Secretary Wilbur and the United States Office of Education, the United States Chamber of Commerce, and the Radio Corporation of America which donated a number of sets, a study was undertaken in different sections of the country to ascertain concrete results from placing for the first time radio sets before adults unable to read and write. The initial study involved one hundred sets in carefully selected areas.

The preliminary report from Lincoln Memorial University, which was allocated twenty-five sets for distribution and study, covers one of the areas. One set was placed in a country store, another in a village restaurant, two in high schools, two in rural elementary schools and nineteen in private homes.

"The results of this listening and the study thereof," the report explains, "are still much too fluid and nebulous for isolation and analysis. Many of these listeners never before listened to radio programs."

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## A College Course in Rest and Relaxation

Barnard College, New York City, is giving a course in rest and relaxation this year, for girls who are under par physically and for whom the regulation physical education courses would be too strenuous.

There are about sixty young women in the rest and relaxation course. When the other girls are going through their three-times-a-week physical activity program, the relaxers are comfortably ensconced in deck chairs on the roof or on a quiet porch. They are urged to relax completely. Reading and talking are not permitted.

The girls are rapidly progressing toward the goal of proper weight and no colds, according to Dr. Gulielma F. Alsop, the college physician. All have gained in weight. When they are sufficiently improved they will take up mild forms of exercise and later resume usual activities.

Credit is given for attendance at the rest classes just as it is for dancing and gymnasium work.

# Classifying Third and Fourth Grade Pupils Homogeneously

*The type of investigation suggested here will enable the principal to keep in close touch with the classification of pupils and to provide for adjustment of problem cases before they become problems*

By C. C. GROVER, Assistant Director, Department of Research and Guidance, Oakland Public Schools, Oakland, Calif.

IT IS the purpose of this paper to discuss some phases of the classification of pupils into homogeneous groups in Grades 3 and 4. The results of a group mental test will be used for this purpose. In the grades above the high fourth, there is some disagreement as to whether the results of achievement tests or of the so-called intelligence tests form the best basis for classification, but it is believed that in Grades 1 to 4 inclusive the results of intelligence tests are more satisfactory.

In the public schools of Oakland, Calif., five types are recognized—the atypical or especially limited; the z or retarded; the y or average; the x or accelerated, and the superior or gifted.

Pupils in the atypical classes are definitely limited in mental ability and extend down the ability scale to institutional cases. In general the intelligence quotient range is from 50 to 70. Occasionally pupils with intelligence quotients as high as 75 belong in these classes, but such cases are rare. Children with intelligence quotients below 50 are usually unable to profit by instruction in the public schools. Pupils in these classes are retarded from one to three years chronologically, and grade lines are not taken into account in their instruction. There is considerable disagreement as to what type of material should be offered in these classes but there is little doubt that it should differ considerably from that offered in the regular course of study. In Oakland this group constitutes somewhat less than 1 per cent of the school population.

Next above the atypical in ability is the z section class. It is composed of pupils who are unable to do the work of the regular section at the normal rate. In general, pupils in these sections will be at age or slightly above age chronologically and somewhat below age mentally. The intelligence quotient range will be from 70 to 90. These pupils will progress through the grades at a normal rate but will cover only the minimum essentials. As this plan works out, if normal progress is encouraged the minimum work of the various grades is not mastered and a z section pupil in the low seventh grade, for example, will make a score on

OAKLAND PUBLIC SCHOOLS BUREAU OF CURRICULUM DEVELOPMENT, RESEARCH AND GUIDANCE

*Record of Group Mental Tests*

*Names of Pupils to Be Arranged Alphabetically, Boys and Girls Together*

| *Name* | *Chron. Age (Years and Months)* | *Test Score* | *Mental Age (Years and Months)* | *G. I. Q.* | *G. I. Q. Rank* | *Teachers' Ratings* | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | *School Work* | *Capacity* | *Industry* |
| Eleanor O. | 10-11 | 102 | 11-0 | 101 | C | C | C | C |
| Evelyn J. | 10-2 | 110 | 11-8 | 115 | B | B | B | B |
| Fred S. | 9-11 | 104 | 11-2 | 113 | C+ | B | B | C— |
| Carolyn B. | 9-0 | 108 | 11-6 | 128 | B | B | A | B |
| Edna B. | 9-3 | 66 | 8-3 | 89 | C— | D | C— | D |
| Pauline A. | 11-7 | 52 | 9-6 | 82 | D | C | D | B |
| Angelina C. | 10-8 | 32 | 6-11 | 65 | E | D | C— | B |

the Stanford Achievement Test equivalent to the norm for the high fifth or the low sixth grades. This is not thought to be undesirable and is probably to be preferred to a policy of retardation. In general this group constitutes from 20 to 25 per cent of the school population.

In the y or average group, the pupils are usually at age both mentally and chronologically and the intelligence quotient range is approximately from 90 to 110. These pupils progress through the school system at the rate of one grade per year and cover the regular work required by the course of study. In Oakland they constitute between 55 and 60 per cent of the school population.

The x section occupies the same position above the normal group that the z section does below it. It is composed of children somewhat above the average in ability. They are at or below age for the grade mentally. The intelligence quotient range in general is from 110 to 130. Such pupils progress through the school system at a slightly more rapid rate than pupils in the y section, usually entering the low tenth grade with from one to two years' acceleration. In addition they are given an enriched and diversified curriculum so that both the quantity and quality of their school work are somewhat different from that in other classes. From 20 to 25 per cent of the school population is found in this group.

Occupying a position at the upper end of the scale are the classes for gifted children. Pupils in these classes are and, it is believed, should be somewhat accelerated chronologically and they are naturally very much retarded mentally as the intelligence quotient range is above 130—in Oakland, from 130 to 186. A greatly modified curriculum is used with these children and considerable freedom from course of study requirements is permitted. Much attention is given to art, music, literature, dramatics, playwriting and the like. In numbers this group is small.

### *Size of Class Varies*

The size of the class for these various sections constitutes an administrative problem and is worked out in Oakland as follows: In the larger elementary schools there are usually enough pupils of one class to make up a half grade to a room, where an enrollment of from 40 to 42 is maintained. In a school of this size, having from 12 to 25 teachers, there will not be enough pupils in the x or z sections for a single half grade to a room, so as many as four half grades may be combined and given to one teacher. Under such conditions, for the z section the minimum enrollment is 25 and the maximum is 35; for the x section an enrollment equal to that in the y sections is maintained. For the atypical class and the gifted class it is unusual to find enough pupils in one school to constitute a section, and these classes are placed in central schools and pupils from adjacent schools sent to them. For the atypical class the minimum enrollment is 16 and the maximum 20; for the gifted class no definite limits have been fixed, but it is thought that approximately 40 pupils can be handled in a satisfactory manner.

It will be seen that more dependence upon the results of intelligence tests has been recommended than is customary and on this point it is my personal opinion that I am giving rather than the practice in the Oakland Public Schools. In many school systems three or four separate items are considered and an attempt is made to take account of all of them before assignment to a section is made. In the discussion that follows it is assumed that the child's health is normal and in case it is not that the advice of the family physician has been secured.

### *Classifying the Pupils*

Probably the most scientific basis for classification would be a regression equation worked out for each school, involving intelligence quotient, attendance, achievement in chosen school subjects and possibly a home rating scale. The working out of such an equation would not be particularly difficult, but it is not believed that the principal would use it if it were provided. In the absence of such an equation there seem to be two methods of using the various factors recommended: (a) pupils are first sorted out on one basis, for example the intelligence quotient, then the residue is sorted again on some other basis such as a reading score, and possibly a third time on teachers' marks; or (b) all the data for each child are collected and placed on one sheet and a teacher, principal or supervisor studies the record and decides upon the classification to be recommended.

It seems obvious that the first method is unsatisfactory. If the various factors are highly correlated with each other then the inclusion of all of them is unnecessary. If they are not highly correlated the proper selection to produce the most satisfactory placement cannot be produced by any such simple arrangement as sorting them into a few odd piles.

The second method is probably better than the first, but at best it is certain to be highly subjective. If there is no definite plan for attaching weight to the various items, then each case is apt to be treated separately and one item given greater importance in one instance and less importance in the next.

A more satisfactory method would be to choose

the most important single item and then to get as reliable and accurate data upon this factor as can be obtained and classify according to them, changing the classification as the exigencies of each particular case demand. It is believed that the most valid single item is an intelligence test score and that within the limited chronological age spread of a single half grade this score is best used if translated into an intelligence quotient. If this principle is accepted then the most accurate possible estimate of the pupil's true intelligence quotient should be obtained. If the results of such an intelligence test and the marks given by the teacher do not agree, then rather than attempt to strike a mean somewhere between the two, a sound procedure would be to give a second intelligence test and, if necessary, a third, until accurate data are obtained.

When such a plan has been put into effect for a number of years and retardation restricted rigidly from the central office, then in theory only transfers from other school systems will need to be adjusted. Any school administrator, of course, will recognize that this situation cannot exist and that a continual check is necessary. In the Oakland Public Schools mental tests are given each semester in the L-1 grade, L-4 grade, L-6 grade, H-8 grade, and in any other grades when requested by the principal. When these data are collected on one sheet it is then possible to make the adjustments that are necessitated by transfers from out of the city, by poor attendance, by late entrance or by various other causes.

### *A Record of Group Mental Tests*

The data on a few cases of this sort and a suggested adjustment for them are given in the accompanying table. The blank is the one used in the Oakland Public Schools for this purpose.

It should be noted that not all of the children listed come from one school and that adjustments probably were made as soon as the information was put in usable shape. The letter ratings in the last four columns are on a 7 point scale, C being average. All of these pupils are in the y section of the L-4 grade.

Eleanor O. is ten years and eleven months old; the normal age for the L-4 grade at the end of the first month when the test was given is nine years and one month. She is therefore one year and ten months retarded, is doing average school work and has average ability. She should certainly be given an opportunity to do the work of the H-4 grade and, if she succeeds here in another year she should be promoted another half grade.

Evelyn J. presents a somewhat similar problem. She is ten years and two months old and therefore is retarded one year and one month; her intelligence quotient is 115 and she is doing distinctly superior school work. A similar treatment is suggested for her, and she should be placed in an x section if one is available.

Fred S. is nine years and eleven months old and consequently is only ten months retarded. He has an intelligence quotient of 113, is doing B work and is below average in industry, a condition that is to be expected in his present grade. While the retardation is slight, he is above average in intelligence and should be accelerated a half grade and placed in an x section.

### *What Some of the Tests Revealed*

Carolyn B. is nine years of age and is consequently at age for the grade. Her intelligence quotient is 128 and her school work is decidedly superior. There is no x section in her school and it therefore seems fair to give her an extra promotion of one half grade and later a second promotion.

Edna B. is nine years and three months of age and is therefore practically at age for the grade. Her intelligence quotient is 89; she is doing inferior school work and her teacher rates her at D. She should be placed in a z section where the work will be better suited to her ability.

Pauline A. is eleven years and seven months old; consequently she is two years and six months retarded. Special permission is required from the central office before a retardation of more than two years is allowed in an Oakland school and it is likely, therefore, that Pauline is a transfer from out of town. Her intelligence quotient is 82 and she is doing average school work. She is doing this average school work, however, because she is two and one-half years older than the average of her class. She is distinctly a z section pupil but if she is doing average school work in the regular section of the L-4 she probably can do satisfactory work in an L-5z section or it is even possible she might be satisfactorily placed in an H-5z section.

Angelina C. is ten years and eight months old, with a mental age of six years and eleven months and an intelligence quotient of 65. Before she is placed in an atypical class the results of this group test should be confirmed by an individual test, but it is likely that Angelina is unable to do regular school work and should be sent to the nearest atypical class.

Such an investigation each semester in the L-4, L-6 and H-8 grades will enable the principal to keep in close touch with the classification of pupils within his school and to provide adjustment for problem cases before they become problems.

# A Grammar School Planned for Present and Future Needs

*The Pine Street School, Spartanburg, S. C., was designed in five sections so that present needs could be adequately met and the other sections added as required, without disturbing the arrangement*

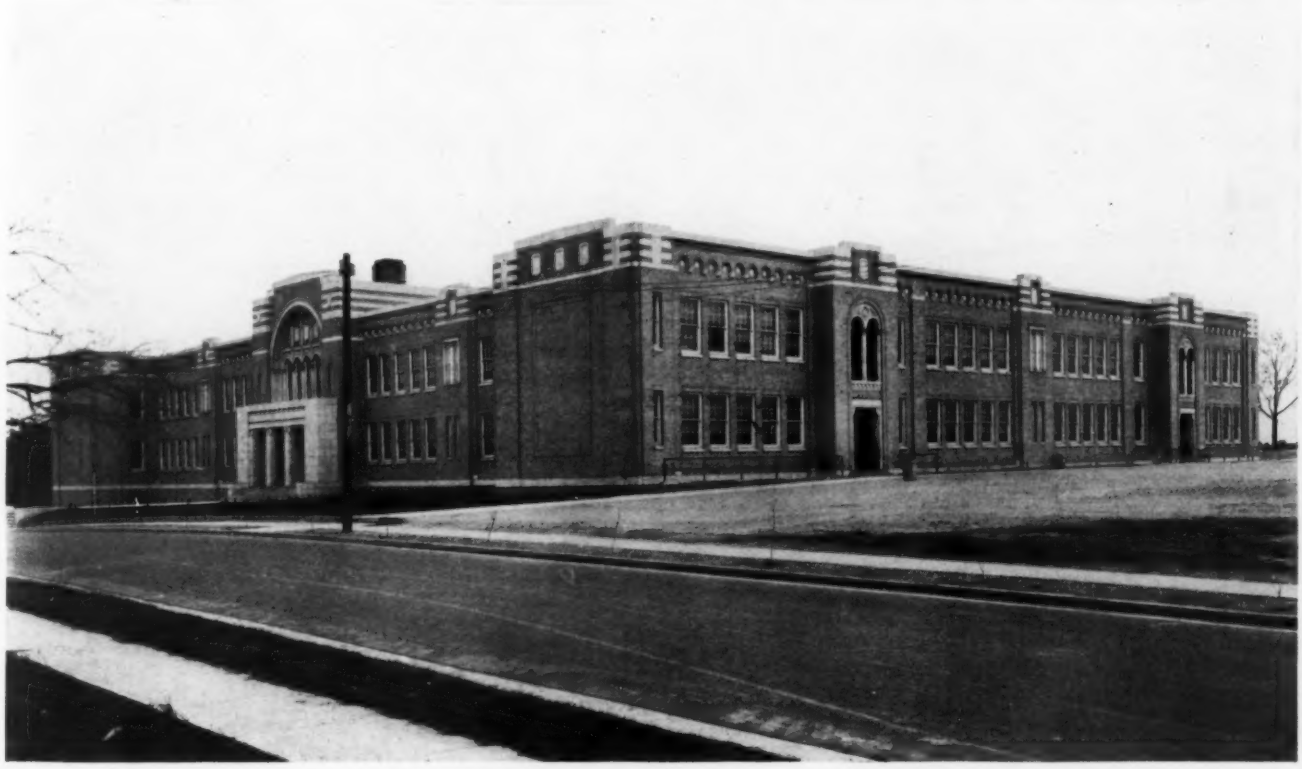
By CHARLES C. WILSON, Wilson and Tatum, Architects, Columbia, S. C.

THE school system of the city of Spartanburg, S. C., has been one of the most successful in the state, not only in the efficiency of its educational work and in its inspiration to the community but in the development of an adequate educational plant. This success may be attributed to the ability of the executive staff and to the devoted service and sound policy of a farsighted board of trustees composed of eminent business men.

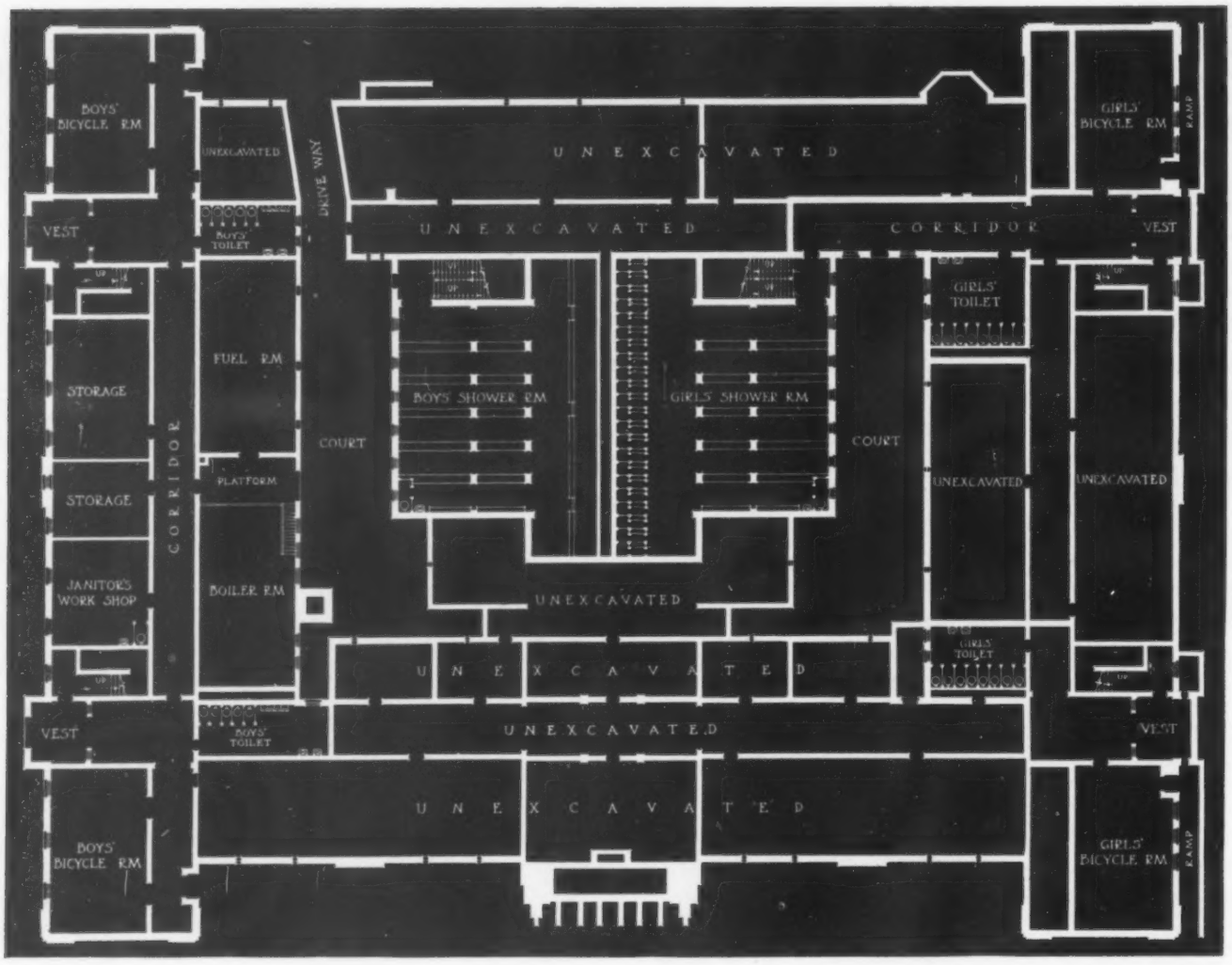
From time to time graded schools and later distinctive grammar schools were built in the several sections of the city and about ten years ago the Frank Evans High School was built in the central section within the business district. While perhaps not intentionally designed in sections, this building was fortunately so planned as to readily admit of extensions and two sections have since been added. While a different architect was employed for each addition, neither the harmony nor the efficiency of the building has been impaired.

In 1928 it became evident that another school was needed in the southeastern section of the city, to keep pace with the growing population. A careful survey by the executive staff revealed immediate need for the accommodation of at least 600 pupils. In five years this number will probably increase to about 1,000.

A city block measuring roughly 274 by 610 feet was purchased. After the new building was under construction an adjoining block, 250 by 525 feet,



*The exterior of the Pine Street School, Spartanburg, S. C., is of light buff brick, with cast stone trim.*




*The basement spaces that have been excavated have been efficiently utilized.*

was acquired as an athletic field for the whole school system, and the intervening street, which had not yet been graded, was closed.

While the grammar schools of Spartanburg were still operating on a schedule of classroom work of one daily session, in which all branches were taught by each teacher and without supervised study periods, it was decided to suit the building to the newer methods and programs. However the new school was planned in standard classroom units so that any special rooms could be readily converted at any time into regular classrooms or the reverse. While the outside and corridor walls carrying all loads would permanently fix the depth of the rooms, all cross partitions were to be of light construction so that they could be easily shifted or removed without disturbing the structural features. It was also decided to design the building in five sections so that present needs could be adequately met with a building of pleasing lines and efficient plan, and the other sections added as required, with the least disturbance and disarrangement.

A compact quadrangular plan was decided upon as best fitting the original lot in both line and grade, and the building was placed approximately in the center of this lot, facing northwest. The lot originally had an irregular slope of about 24 feet in length, and after all practicable grading and terracing that the adjacent streets would permit, there was still a difference in level of about 10 feet in the length of the building, which was therefore designed with grade entrances to the first floor on the south end and to the basement floor on the north end.

### *How the Basement Was Planned*

Most of the basement is undeveloped because basement rooms are too often in emergency converted into classrooms in spite of their inadequate light, damp walls and floors and bad ventilation. On the north side, where the basement floor is at grade, two bicycle rooms are provided, a janitor's workshop, two large storage rooms and two toilets, while the boiler and fuel rooms are excavated to the proper depth. Under the central block, two locker and shower rooms have been provided, the floors of which are about 4 feet below the natural

grade, giving ample light and ventilation above grade. On the south end, where the ground is highest, excavations were made only for two bicycle rooms with ramp approaches and two toilets.

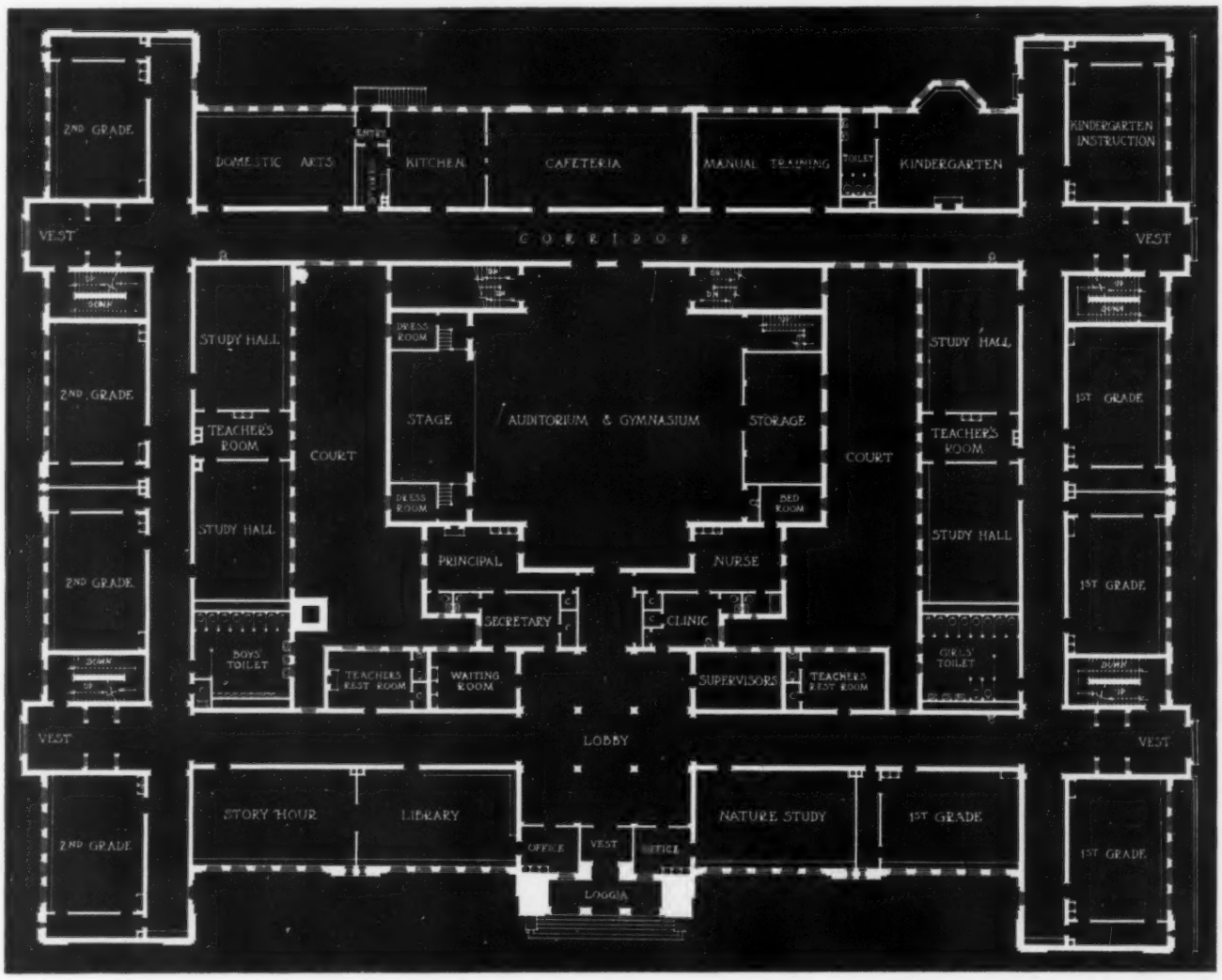
The building is planned to accommodate the first to the sixth grades, inclusive, with four sections to each grade, requiring twenty-four standard classrooms for forty pupils each. The classification of pupils in each grade into those of bright, average and backward intelligence will be handled by the sections.

Four entrances for pupils have been provided, two on the north by stairways from the basement floor and two on the south at the first floor grade. The public entrance is at the center of the front or northwest side through a loggia and vestibule.

The central lobby at the front entrance and communicating with the public spaces and executive offices is 38 by 38 feet, and has Caen stone walls and a richly coffered ceiling. The floor is of terrazzo in a geometrical pattern formed by brass dividing strips. Two framed bulletin boards are symmetrically placed on the two side walls. The central lighting fixture, in the form of a geographical globe, with the topography in relief, has proved of interest. The corridors parallel to the long sides are 11 feet wide, those parallel to the ends are 9 feet wide, and at the intersections approaching the vestibule they are increased to a width of 14 feet. All corridors have terrazzo floors divided into 3-foot squares by brass strips. They are wainscoted 4 feet 6 inches high with salt glazed buff brick. The distance from any room to an exit does not exceed 80 feet.

There are four main stairways of the standard smoke tower type, built in accordance with the school building code of the state of South Carolina. They are completely enclosed in solid brick walls, and are approached only through open vestibules. Each stairway is in two flights 4 feet 6 inches wide, separated by a 12-inch brick wall. All walls in stairways are faced from floor to ceiling with glazed buff brick. The risers are 6 inches and the treads 11 inches. They are finished in terrazzo.

These stairways ensure safety against the passage of smoke or fire from one story to another




*The administration section, the clinic, the auditorium, the cafeteria and special classrooms are on the first floor.*

and greatly reduce the danger of panic. There are no balustrades to slide on or to collapse and no well holes to fall into.

Two pupils' toilet rooms are on the first floor and four on the second, so placed as to be easily accessible to all the pupils. The floors and 5-foot wainscoting are of terrazzo in 3-foot squares. The stalls are of enameled sheet steel construction and the plumbing fixtures are of the finest grade. Behind each battery of fixtures there is a 2-foot pipe and ventilating space, with a vent opening from each stall. These are extended to the roof and connected to 24-inch revolving ventilators, thus ensuring a constant and adequate flow of air. The toilet rooms are well lighted with two windows measuring 3 feet 6 inches by 8 feet. A single wall type drinking fountain is provided in the corridor adjacent to each toilet room.

As there is a large auditorium in the Frank Evans High School not far from the Pine Street School, a public auditorium in this building was not considered necessary. A combined gymnasium and assembly room, seating 500 on the main floor and 150 in three small galleries, however, is provided in the central block, opposite the main public entrance. It is well lighted and ventilated by twenty-nine clerestory windows and has a stage measuring 18 by 28 feet, just large enough to accommodate an orchestra, two dressing rooms and a moving picture booth. The room is also equipped for talking pictures and radio. There is a well lighted storage room, 17 by 28 feet, for movable chairs and gymnasium equipment. The floor is of maple and the entire ceiling of acoustical material. Two double flights of stairs lead from this room to the locker and shower rooms below, and egress is provided to the central lobby in front and to the corridor in the rear.

### *Safeguarding Health*

Rooms for the health service adjoin the gymnasium and open on the central lobby opposite the main entrance. They include a clinic room and toilet, a nurse's room, a bathroom and a small bedroom to care for cases of serious accident and sudden illness.

The administration section also adjoins the gymnasium, opposite the clinic, and opens directly on the central lobby. It comprises a waiting room, a secretary's office and a principal's office, with two private toilets and ample storage closets and cabinets. The principal's office has a fireplace for use when the heating plant is not in operation. The clock and telephone systems are centered in and controlled from the executive suite.

For the convenience of the smallest children the library is placed on the first floor, immediately to the left of the front entrance, with a librarian's office, 10 by 12 feet, opening on the central lobby, adjoining. The room for the story hour is next to the library, with double glass doors between, and will be in charge of the librarian.

The cafeteria, 21 by 45 feet, and the kitchen, 21 by 21 feet, with a separate service entrance, are placed on the rear corridor, which offers convenient egress to the playgrounds at each end.

### *Special Rooms for Special Subjects*

In addition to the twenty-four classrooms, accommodating the six grades in four sections each, special rooms have been provided for nature study, geography, history, writing, elementary manual training, elementary domestic arts, drawing, painting and modeling, which will be in charge of special teachers. As nature study requires the preparation of specimens, a 10 by 12 foot office is provided in connection with this room. There are two study halls, with a supervising teacher's room between, at each end of the first floor, and one double study hall over these spaces at each end of the second floor.

Two rooms are provided for the kindergarten on the southeastern corner of the first floor where they will get an abundance of sunlight. They have a separate entrance from a special garden or playground. One of these rooms is for formal instruction and one for play. The latter is made homelike with a fireplace and a deep bay window with a window seat and it has a private toilet.

The standard classroom is 21 by 30 feet, with an old-fashioned cloakroom 5 by 21 feet. The classroom is lighted and ventilated on one of the long sides with five double-hung windows, 3 feet 6 inches by 8 feet. The cloakroom has one window and an exhaust flue is carried to the roof and connected to a revolving ventilator.

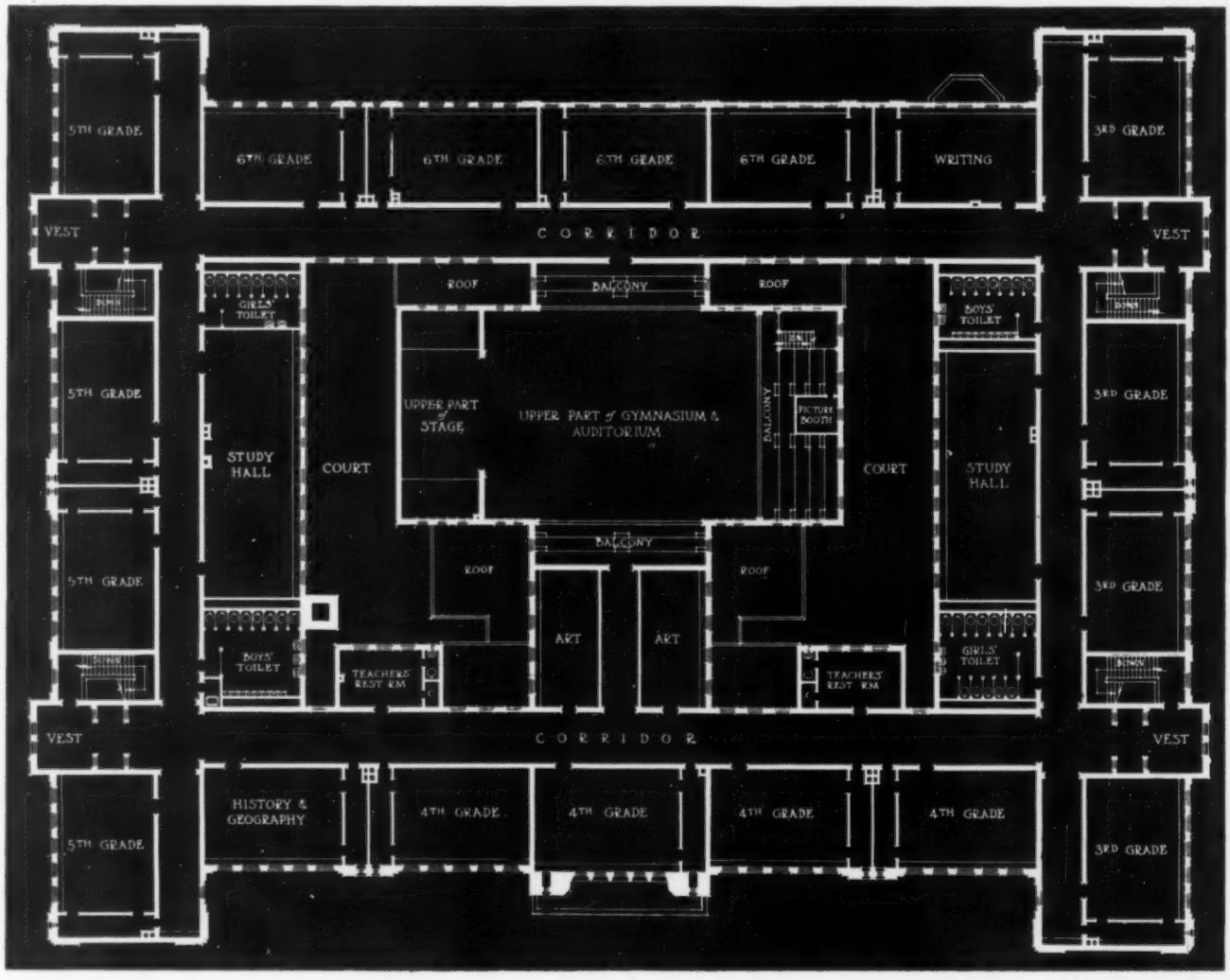
The window stools are 3 feet 11 inches above the floor and are extended to form an 18-inch shelf along the entire length of the room. There are window deflectors of wired and polished plate glass, so that the lower sash can be raised 10 inches without creating a draught. The space under the window shelf is enclosed with panel work, and the central portion of this cabinet houses the large radiator, with a base grille in the front and a top grille in the shelf. At each end of this cabinet there is a nest of twenty spacious drawers, so that the work and belongings of each pupil may be kept in order and the usual clutter in the desks avoided. On the opposite side of the room in the front corner is a teacher's cabinet with shelves, drawers, hooks and an umbrella rack and in the rear corner a case of open bookshelves.

Two sides of the room have natural slate blackboards, with removable dust troughs, a cork tack strip above and a cork bulletin board at each end. On the wall behind the teacher the blackboard is in four hinged leaves showing finished blackboard surface on both sides, thus doubling the available area and permitting the work to be kept out of view until needed.

The cloakroom is equipped with standard hangers and shelves for forty pupils. It communicates with the classroom through two cased openings without doors and also has a door to the corridor. One unique feature is a footwarmer consisting of a coil of steam pipe 18 feet long immediately under a floor register.

Four teachers' rest rooms, 12 by 18 feet, with private toilets and coat closets, and with three large windows, are provided, two on the first floor and two on the second. A supervisor's room, 12 by 18 feet, opens on the central lobby.

The building is of fireproof construction, with all outside walls and corridor partitions carrying floor and roof loads of solid masonry, while the cross partitions are of gypsum block. The floors and roof are constructed with trussed steel bar joists over which is a 2-inch slab of concrete reenforced with thoroughly embedded wire fabric. The bottom of the steel joists is protected with metal lath and gypsum plaster. This type of construction was chosen on account of the open space within the floor which it affords for pipes and conduits, all of which are concealed. The stairs, landings and vestibule floors are all of solid reenforced concrete construction, and the entire floor over the boiler and fuel rooms is of ribbed concrete with tile fillers.




*Two large study halls are on the second floor in addition to the rooms for the third, fourth, fifth and sixth grades.*

The finished floors of the lobby, corridors, stairways, and toilets are of terrazzo and in the vestibules the floors are red quarry tile. The gymnasium floor is of maple and all other floors of rock gum laid over concrete on sleepers and fill.

The interior doors are veneered in birch, with the upper half glazed with 10 by 16-inch lights. All other interior woodwork is yellow pine, stained mahogany and finished in dull varnish. The exterior doors are of solid white pine, glazed, and

the door and window frames and sash of cypress. All exterior openings are weatherstripped. The plastering on the walls is hard finish up to the picture molding and sand finish above and on the ceilings. Both walls and ceilings are painted a light cream with flat wall paint.

The hardware is of the schoolhouse type, which permits doors to be locked from the outside but not from the inside and no panic bolts have been used.

*Lighting and Heating Facilities*

The classroom lights are placed in two lines parallel to the long sides of the room, and each line is on a separate switch so that on very dark days the inner line alone may be burned. The building is fully equipped with program clocks, fire alarms and intercommunicating telephones. Outside telephone service, however, is from the executive offices and the health suite only.

The building is heated by a vacuum vapor modulation system, with concealed radiators. Exhaust ventilation depending on revolving roof ventilators is provided for toilets and cloakrooms, while classrooms and other spaces are ventilated through the windows only, which in this climate may be kept open for a time at least almost every day.

The outside walls are faced with smooth light buff brick, laid in natural gray cement mortar, with ⅜-inch joints, concave tool pointed. All trim, special features and details are of white cast stone, with rubbed finish. The design is simple, with a mildly modernistic touch.

The total cost of the entire building, based on the contract bids received, was $390,000, or 28 7/10 cents per cubic foot. The cost of the sections now completed was $245,750, or 29 3/10 cents per cubic foot.

*Ample Playground Space Provided*

The playgrounds, not yet fully developed, are on either end of the building and comprise two tennis courts, two basket ball courts and three handball courts, with two smooth grass lawns 100 by 125 feet and 100 by 75 feet, respectively, on which the children can romp without participating in organized games. Near the street line on one side and at the edge of the terrace on the other there will be a small open pavilion or shelter with a tall flagpole rising from the pavement in front.

A separate playground on the southeast, about 50 by 150 feet, enclosed by a hedge, is provided for the kindergarten. The athletic field for the whole school system on the adjacent block to the rear has been graded and is now under development.

## Improving Library Facilities in High Schools

There are between 15,000 and 20,000 high schools in the United States without library facilities as compared with slightly more than 3,000 in which some type of library service is available, according to a report from the American Library Association.

Many high schools are, however, expected to establish or improve library service during 1931 in order to meet the requirements for accredited standing set up by the Southern, North Central and Northwestern associations of colleges and secondary schools. This action is also being stimulated by grants from educational foundations to aid the development of library service in all types of schools from elementary grades to universities.

Recent grants totaling over $1,000,000 include $460,000 from the Carnegie Corporation to increase book collections in colleges and universities and $300,000 for training librarians, $80,000 from the General Education Board for training school librarians and more than half a million dollars from the Julius Rosenwald Fund to aid book service in rural districts.

In order to help schools meet the situation created by this new and active interest in school libraries, the American Library Association has completed during the year two studies of school library problems and two basic lists of books, one for grade school and one for high school libraries. "The Library in the School," by Lucile F. Fargo, is a general discussion of methods and techniques used in school libraries. "The Program for Elementary School Library Service," also by Miss Fargo, deals with the larger aspects of library administration in grade schools. Standards as adopted by the several accrediting bodies will make up a large part of the "School Library Yearbook, No. 4," which will be published by the association in the spring of 1931.

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## The Oldest and the Youngest at the University of Kentucky

There is many a day between the ages of three and a half and sixty-three years. However there are two students at the University of Kentucky with more than half a century between them in years, who pay allegiance to the same school and find a common bond in loyalty. They are little Frances Thomas Horlacher, a pupil in the teacher training school kindergarten at the university, and R. M. Millard, senior in the college of education.

# How the Smith-Hughes Act Affects Vocational Expenditures*

*Statistics indicate that the majority of the states have shifted the responsibility that the Government has placed upon them to the local school communities*

By CLARENCE O. LEHMAN, Ph.D., Director of Training and Head of the Education Department, State Normal School, Geneseo, N. Y.

ON SEVERAL occasions the United States Government has enacted legislation to stimulate the inauguration and extension of special school undertakings in the public schools. Thirteen years ago the Smith-Hughes Act was passed by the congress for the purpose of encouraging the extension and maintenance of vocational education in the public schools.

The major provisions stipulated by the Smith-Hughes Act are: creation of a Federal board for vocational education; acceptance of the provisions of the act by the states; Federal aid to the states accepting, for the salaries of teachers in the vocational schools and departments created, provided such states match the specified aid dollar for dollar, either from state funds or local funds; the courses to be given in public schools, these to be of less than college grade; vocational classes and schools to be for those over fourteen years of age; a course to be offered to both full-time and part-time classes or schools; courses primarily intended for those preparing to enter or who have entered a trade or industrial pursuit.

### *Apportioning Federal Aid*

The aforesaid Federal aid is divided into four funds to be used as follows:[1]

1. For the purpose of cooperating with the states in paying the salaries of teachers, supervisors and directors of agricultural subjects, to be allotted to the states in the proportion that their rural population bears to the total rural population of the United States.

2. For the purpose of cooperating with the states in paying the salaries of teachers of trades, home economics and industrial subjects, to be allotted to the states in the proportion that their urban population bears to our complete urban population.

3. For the purpose of cooperating with the states in preparing teachers, supervisors and directors of agricultural subjects and teachers of trade and industrial and home economics subjects, to be allotted to the states in the proportion that their population bears to the total population of the United States.

4. For making or cooperating in studies, investigations and reports as to needs and courses in agriculture, home economics, trades industries and commerce.

### *Acceptance Is Nationwide*

Financial aid from Federal funds is the inducement offered to the states to obtain action on their part to offer more and better provisions for vocational training in the public schools. The method of apportioning the funds for vocational education to the various local school communities is left to the discretion of each state but is subject to the approval of the Federal Board of Vocational Education.

Within a few years after this Federal statute went into effect, every state had enacted the necessary legislation to receive the financial benefits for vocational education. The analysis of the school statutes of the various states reveals the fact that special aid for vocational education as designated by the Smith-Hughes Act is the only type of special school project that has 100 per cent legislative approval from all the forty-eight states.[1]

Since this special school activity has won the universal approval of the legislative bodies of all the states and since this particular project has been stimulated primarily by "national aid," it will be interesting to ascertain whether or not the states

*This is the third of a series of articles by Doctor Lehman dealing with state aid.

[1]Cubberley, E. P., Public School Education in the United States, New York, Houghton, Mifflin Co., p. 418.

[1]Lehman, Clarence O., What the States Are Doing for Public Education, The NATION'S SCHOOLS, vol. 6, p. 49, November, 1930.

AMOUNTS OF FEDERAL, STATE AND LOCAL FUNDS EXPENDED FOR VOCATIONAL EDUCATION, PROVIDED BY THE SMITH-HUGHES ACT, IN THE FORTY-EIGHT STATES, EXPRESSED IN PERCENTAGES, 1926-27, AND THE RANK OF EACH STATE FOR EACH FUND*

| | *Per Cent* | | | *Rank* | |
|---|---|---|---|---|---|
| *State* | *Federal* | *State* | *Local* | *Federal* | *State* | *Local* |
| Alabama | 35.84 | 39.12 | 25.04 | 26 | 6 | 45 |
| Arizona | 38.82 | 23.33 | 37.85 | 19 | 19 | 35 |
| Arkansas | 47.41 | 40.27 | 12.32 | 4 | 5 | 46 |
| California | 14.31 | 14.31 | 71.38 | 47 | 33 | 2 |
| Colorado | 17.27 | 18.33 | 64.40 | 46 | 24 | 5 |
| Connecticut | 27.54 | 72.46 | 0.00 | 38 | 1 | 48 |
| Delaware | 39.09 | 29.38 | 31.53 | 17 | 13 | 39 |
| Florida | 29.98 | 29.98 | 40.04 | 36 | 12 | 33 |
| Georgia | 42.10 | 15.73 | 42.17 | 10 | 30 | 26 |
| Idaho | 39.17 | 16.06 | 44.77 | 16 | 29 | 21 |
| Illinois | 26.70 | 19.25 | 54.05 | 39 | 22 | 13 |
| Indiana | 22.79 | 12.19 | 65.02 | 42 | 38 | 4 |
| Iowa | 42.47 | 1.78 | 55.75 | 7 | 48 | 11 |
| Kansas | 25.92 | 17.98 | 56.10 | 40 | 25 | 10 |
| Kentucky | 49.22 | 9.51 | 41.27 | 1 | 42 | 30 |
| Louisiana | 42.29 | 14.91 | 42.80 | 8 | 32 | 24 |
| Maine | 47.11 | 25.55 | 27.34 | 5 | 18 | 44 |
| Maryland | 37.09 | 7.42 | 55.49 | 25 | 44 | 12 |
| Massachusetts | 11.63 | 45.73 | 42.64 | 48 | 3 | 25 |
| Michigan | 27.10 | 15.60 | 57.30 | 37 | 31 | 8 |
| Minnesota | 38.92 | 19.02 | 42.06 | 18 | 23 | 27 |
| Mississippi | 33.12 | 36.16 | 30.72 | 30 | 8 | 41 |
| Missouri | 38.09 | 32.52 | 29.39 | 22 | 11 | 42 |
| Montana | 41.83 | 16.43 | 41.74 | 11 | 28 | 29 |
| Nebraska | 30.23 | 27.88 | 41.89 | 35 | 16 | 28 |
| Nevada | 37.50 | 34.38 | 28.12 | 24 | 10 | 43 |
| New Hampshire | 31.75 | 9.31 | 58.94 | 32 | 43 | 6 |
| New Jersey | 33.30 | 35.61 | 31.09 | 29 | 9 | 40 |
| New Mexico | 38.65 | 28.85 | 32.50 | 20 | 15 | 38 |
| New York | 21.15 | 40.49 | 38.36 | 43 | 4 | 34 |
| North Carolina | 32.96 | 21.35 | 45.69 | 31 | 21 | 18 |
| North Dakota | 38.43 | 16.53 | 45.04 | 21 | 27 | 20 |
| Ohio | 31.14 | 23.28 | 45.58 | 33 | 20 | 19 |
| Oklahoma | 45.06 | 11.11 | 43.83 | 6 | 40 | 23 |
| Oregon | 42.11 | 14.05 | 43.84 | 9 | 34 | 22 |
| Pennsylvania | 23.15 | 36.59 | 40.26 | 41 | 7 | 32 |
| Rhode Island | 40.11 | 11.77 | 48.12 | 14 | 39 | 14 |
| South Carolina | 34.65 | 54.48 | 10.87 | 27 | 2 | 47 |
| South Dakota | 40.85 | 12.26 | 46.89 | 12 | 37 | 15 |
| Tennessee | 33.46 | 25.76 | 40.78 | 28 | 17 | 31 |
| Texas | 39.39 | 3.42 | 57.19 | 15 | 47 | 9 |
| Utah | 30.37 | 10.90 | 58.73 | 34 | 41 | 7 |
| Vermont | 49.12 | 17.55 | 33.33 | 2 | 26 | 36 |
| Virginia | 37.90 | 29.30 | 32.80 | 23 | 14 | 37 |
| Washington | 48.49 | 4.83 | 46.68 | 3 | 45 | 16 |
| West Virginia | 40.85 | 12.91 | 46.24 | 13 | 36 | 17 |
| Wisconsin | 19.09 | 14.36 | 76.55 | 44 | 46 | 1 |
| Wyoming | 17.71 | 13.78 | 68.51 | 45 | 35 | 3 |

*These data were secured from the eleventh annual report of the Federal Board for Vocational Education, 1927, and from the current annual and biennial reports of the chief state school officials of the several states.

are actually assuming their share of the expenditure for the aforesaid project. The Federal act stipulates that the state desiring to obtain such aid is required to match all Federal grants dollar for dollar, either from state funds or local school funds. Consequently the question arises whether the states actually accept this responsibility of financing the extension and maintenance of vocational education in the public schools or whether they utilize the loophole in the Federal act and pass the responsibility for matching the Federal grants to the local school districts or units.

Comparative data are presented in the accompanying table showing the relative amounts expended from Federal, state and local funds, respectively, for the said vocational education project. Using the total amount of funds expended for vocational education under the provisions of the aforesaid act as 100 per cent, the data indicate that the five states that expended the highest percentage for the said purpose from the Federal, state and local funds, respectively, for the fiscal year 1926-27 were: Federal—Kentucky, Vermont, Washington, Arkansas, Maine; state—Connecticut, South Carolina, Massachusetts, New York, Arkansas; local—Wisconsin, California, Wyoming, Indiana, Colorado.

The states that expended the lowest percentage for the aforesaid undertaking in the respective units during the same year were: Federal—Massachusetts, California, Colorado, Wyoming, Wisconsin; state—Iowa, Texas, Wisconsin, Washington, Maryland; local—Connecticut, South Carolina, Arkansas, Alabama, Maine.

*How Federal, State and Local Funds Are Spent*

Other significant results and trends that are revealed by the comparative study as indicated in the table are as follows: Only one state, Connecticut, supported the entire cost for vocational education under the provisions of the Smith-Hughes Act from Federal and state funds during the fiscal year 1926-27. In eleven or nearly one-fourth of the states, the local school districts expended more than 50 per cent of the total amount disbursed for vocational education during the fiscal year 1926-27. Only in eleven states did the percentage of the total amount expended for vocational education from state funds equal or exceed the amount granted from Federal funds. Only in ten states did the percentage of the total amount expended for vocational education from state funds equal or exceed the amount granted from local funds for this purpose.

In general we may conclude that more than 75 per cent of the states have permitted the local communities to help the states match the Federal funds granted to them, in addition to the extra expenditures that the local communities were required to meet in order to sponsor a program of vocational education. This indicates definitely that in the majority of cases the states have shifted to the local school communities the responsibility that the Government has placed upon them. It seems that the letter of the law has been observed but the spirit has been evaded.

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## School Bus Costs—A Problem for Boards of Education

Gradual displacement of the small, usually inadequate rural school by the consolidated school has brought to school boards throughout the United States another problem—that of providing and paying for child transportation.

Data which are expected to be of aid in solving the problem are disclosed in an Office of Education bulletin on "Factors Affecting the Cost of School Transportation in California," prepared by Frank O. Evans, director of administrative research, Los Angeles Public Schools.

By comparison with other states, California transports its school children longer distances. Approximately 26 per cent of the high school pupils there live more than ten miles from their school. The average pupil pays $41.35 a year bus fare to and from school, while the cost for the same privilege to the average elementary school pupil is $28.86 per year. A school bus in the Pacific Coast state makes a daily trip of 37.7 miles on the average, and carries an average load of 30.6 pupils. The expenditure for school transportation has come to occupy third place in the budget of union schools in the state, and amounts to 11.5 per cent of the total current expense.

"The present large expenditures," concludes Doctor Evans, "seem to be justified both as an economy and as a means of enlarging the educational opportunities of more than 30,000 children in the state."

William John Cooper, United States commissioner of education, commenting on the subject of school child transportation and on the survey just completed says, "In order to equalize the opportunities for children some effort has been made to increase the size and consequently the wealth of the unit for school administration, and to establish so-called consolidated schools, to which children are transported. The transportation business carried on by some school boards involves an expense element of such magnitude that every effort consistent with the safety of pupils must be made to reduce its cost."

# An Experiment in Counseling and How It Succeeded

*So much have the senior high school pupils of Sacramento, Calif., benefited by the counselor system that it is the hope of the school heads to extend it*

By LAURETTA M. FERGUSON, Vice-Principal in Charge of Counseling, Sacramento City School Department, Sacramento, Calif.

THE need of guidance for adolescent youth has always been recognized. All the fundamental institutions of society, the family, the church, the state and the school, have attempted in some way to render this service; but at no period in the world's history has life for youth been so complex as it is at the present time, and at no time has the need for guidance been so imperative.

This complexity has entered into the organization of the modern high school. Society is placing a new valuation upon high school training and is demanding that it be made available to every individual, regardless of his native ability or his vocational plans. The high school is endeavoring to meet the varied needs of the most diverse types of pupils and as a result the choice of courses has become so wide as to be confusing to the pupil of normal ability with the average background of home direction. How much more must this be true of the pupil who is thrust into school by the compulsory education law, often with no definite plans for the future and with little understanding by himself or his parents as to the opportunities offered by the school.

### *Why Counselors Are Needed*

The problem of directing the high school youth so that he may obtain the best that the school has to give him for his own development, and at the same time realize his responsibility for making the school socially and educationally of value to his fellow pupils, is coming more and more to be recognized as one of the most important functions of the secondary school of to-day. To meet this situation, there has appeared a new official in many high schools known as the counselor. The title may vary in different schools but the variation in title is insignificant compared with the variation in duties assigned to this personage in high schools scattered over the country. Thus far the office of student counselor is still in a state of becoming and each school in which he is found is an experimental station of interest to every other school that is endeavoring to give this counseling service to its pupils.

Because of the eagerness with which the counselors in our system have studied the experiences of other schools having counselor systems when they could find reports of them, and because of the limited information they have found available, it has seemed worth while reporting for other schools interested in establishing a counselor system the experiment carried on in the Sacramento Senior High School, Sacramento, Calif., during 1928-29. This experiment thoroughly convinced us of the value of the counselor system.

### *Sacramento's Plan*

The present counseling system of the Sacramento Senior High School was first established in the fall of 1928. The plan of organization called for the appointment of ten counselors under the leadership of one of the vice-principals. Nine of them were to be counselors for the so-called academic group while one was to administer the counselor duties for the boys in the Smith-Hughes shops. These ten counselors with the vice-principal acting as chairman held many conferences at which they discussed and outlined methods of procedure, compared experiences and decided upon the duties that demanded immediate attention. The principal of the high school frequently attended these conferences and gave helpful suggestions.

Ten counselors appointed included five men and five women. They were selected from the faculty already in the school because it was believed they had the personalities that fitted them for that type of work. An effort was made to choose persons

who had had experience of a varied nature, had a sane outlook on life and had a keen and intelligent interest in boys and girls and their problems. These were the first qualifications but because of the varied nature of the work other characteristics were essential. The counselors were to handle the attendance of all the pupils in their group and deal with all but the most serious discipline cases. They were to make contacts with the homes by telephone and by personal conferences. They needed to be accurate in keeping records, firm in discipline and tactful in meeting people. Two of the counselors chosen had done personnel work in industrial organizations, five were parents of high school pupils, two had been high school principals and two had served as deans of high school pupils. All had had a number of years' experience as successful classroom teachers.

*Each Counselor Directs 275 Pupils*

The counselors were given two-fifths to three-fifths of their time for work in the counseling room and each carried a fractional load of class work. This was believed to be better than to have a smaller number of counselors giving all of their time to large groups of pupils. Each counselor had a group of approximately 275 pupils and, at the beginning of the year, each group was made up of pupils belonging to one grade. This could not continue to be true, however, since the tendency is for groups to become smaller as pupils drop out of school. The incoming sophomore class is always too large for the counselors released by the graduation of seniors. The plan is to keep the pupils with the same counselor through the three years in senior high school. Thus as new groups enter they are distributed to augment the groups that have decreased in size. The unit used is the home room group. All the pupils in any home room have the same counselor.

A large study hall, no longer needed since the school has adopted the hour period, was set aside for the use of the counselors. Centrally located on the ground floor and on a hall comparatively free from congestion, the room was equipped with desks, steel filing cases and telephones. Each counselor was given large folders in which to preserve all the material useful in making case studies and a set of personal record cards to be filled out as the counselor became acquainted with his pupils and had access to the results of the tests taken in the junior high schools. Each counselor had also attendance cards, scholarship record cards and daily program cards for all the pupils in his group. Each was given one or two pupil assistants who did routine work for them in copying or filing or delivering messages, one hour each day. These pupils were selected from the group of seniors who signed up for "Civic Service." They received not only two and one-half credits granted for that work but also valuable training in office routine, and they relieved the counselors of much clerical work that would otherwise have interfered with their success at real counseling.

*Establishing Relations With the Pupils*

The functions of the counselors were many and varied. Since the system was new, each counselor had a large group of pupils with whom to become acquainted. They needed to win the confidence of the boys and girls so that they would look to the counselors for help and advice on all of their problems. The whole scheme was new to the faculty as well as to the pupils, so the counselors had to interpret it to the teachers and convince them that the counseling system was a real aid to school efficiency.

The following paragraphs suggest some of the ways in which the counselors established relations with the pupils of their groups.

1. Checking attendance: All attendance records were in the hands of the counselors and all irregularity in attendance became a problem for the counselor. Each morning there was placed on the counselor's desk a list of all absentees in his group for the previous day. During the first period or before school, when all of the counselors were at their desks, pupils came in with their notes from home, to get readmission slips. These were issued by the counselors, stamped "excused" or "not excused," and the lists checked accordingly. Later in the day, the counselors called the homes of pupils who had not returned to school or whose explanation for absence seemed unsatisfactory. They notified teachers as to causes of absence and the time of the probable return of pupils who were out for long periods. Cases that could not be reached by telephone were handled by a note to the homes or a report to the city attendance department.

*Improving the Attendance Record*

Tardiness also involved a call upon the counselor for an admission slip to class. The diligence of the counselors in keeping after pupils who were habitually tardy, together with a rule that no tardiness would be excused, materially reduced the cases of tardiness. In fact, the close follow-up of both absence and tardiness brought about a decided improvement in the attendance record of the school. For the counselors it involved the writing of about 1,500 notes and the making of 3,500 telephone calls during the year.

2. Handling discipline cases: All cases of dis-

cipline went first to the counselor. This was because the counselor probably knew the pupil better than any one else in the school organization and also because he would be enabled to build up a case record of real value in interpreting the pupil's character. The counselor frequently conferred with the teacher who sent the pupil to the counsel room and together they settled the case. In the case of a serious breach of school discipline or of that of a chronic offender, the principal was consulted. In such cases, the counselor sent to the principal's office a case history of the pupil, showing his attendance and scholarship record as well as his behavior record and, if possible, information about home conditions and outside interests and activities. That most cases of school discipline were handled by the counselors is shown by the summary of counselor activities for the year. This gives the total number of discipline cases adjusted by the counselors as 1,043 while the number of cases referred to the administration was only 180.

*Helping Pupils Plan Their Courses*

3. Educational guidance: During the year, every pupil in the high school had at least one conference with his counselor concerning his choice of school studies and his purpose in selecting them. Together they went over the past record and planned the course for the future. The counselor had in mind the information available as to scores made in achievement tests and qualities of character as indicated on the personal record card. Having worked out the complete program of studies for the three years of senior high school, the counselor filed one copy and gave the other to the pupil. On the basis of plans worked on in these conferences, the pupils register in June for classes they will attend during the fall semester. Of course, these complete high school schedules are not necessarily final, but such conferences do serve to direct the attention of the pupils and of their parents to the courses offered in high school and may lead to wiser choices.

*Other Counselor Duties*

When the report cards were issued to the pupils, duplicate copies were sent to the counselors who checked them over and called in such pupils as needed to be encouraged to do better work. Sometimes changes had to be made in the courses taken and, in such cases, reports of these conferences were sent to the homes through the mail or by telephone and the parents invited to confer with the counselor. Records show that the number of conferences with pupils during the year was 6,160 while the conferences with parents other than telephone calls numbered 300. The weekly counselor reports showed a growing tendency on the part of the parents to come to confer with the counselors. They also showed a decreasing number of failures in class work.

All adjustments of pupils' daily programs during the term were made by the counselors. Such were sometimes necessary because of complete failure in a course or because of the need to change from one speed group to another. The counselors issued the transfers only after conferring with the pupil and the teacher. Of course, the approval of the parents was necessary before this adjustment could be made.

4. Health: The counselors had too many pupils in their groups to be held responsible for the health problems of the pupils, but they were alert to conditions of health that affected school progress and frequently arranged conferences for the pupils with the health or personnel department of the city schools or advised the parents of the possible need for medical attention.

5. Group conferences: Besides meeting the pupils individually in the counsel room as they came or were summoned there, the counselors met them as groups with the home room teachers in the home rooms, going over with them in a more general way, the courses offered in the high school and the requirements for graduation.

*System Is Succeeding in Sacramento*

These, then, were the routine duties of the counselors of the Sacramento High School. But the personal relations established between the counselor and the pupils led to many services that cannot be enumerated, services that demanded time and patience and the utmost skill on the part of the counselor. A good counselor must function during school hours and before and after, and the personalities of the persons chosen as counselors determine the success of the counseling system in any school.

Sacramento Senior High School is fortunate in having a group of counselors who are earnest in their work. They have acquired considerable experience and have won the cooperation of the faculty. Experience has shown the need of some minor changes. The counsel room has been better equipped with an individual office for each counselor, and a new attendance secretary relieves the counselors of many routine tasks and keeps a closer check on attendance irregularities. We are hoping to see the counselor system extended to all the junior high schools and carried on into the junior college, for we believe it is one of the most valuable services the Sacramento School Department can render to the adolescent youth of the city.

# Should the Business Manager Defer, and to Whom?

*The St. Louis system, which is run by six independent school officers, is here cited as proof of a thesis that school government should be democratic and not autocratic*

By CHARLES L. BARR, Assistant Supply Commissioner, Board of Education, St. Louis, and President, National Association of Public School Business Officials

IN THE November issue of The NATION'S SCHOOLS there appeared an editorial under the caption, "Should the Business Manager Defer to the Superintendent?"

Thus again is brought forth to light a much mooted and bandied around question which has worried educators for many years and which has not yet been definitely settled. Just so long as the various states and municipalities continue to enact laws at variance with each other, just so long will the indecision relating to this abused subject exist. The NATION'S SCHOOLS has raised the issue anew and at the invitation of the editors I am attempting a defense of "the other side."[1]

My study of the editorial leads me to the belief that coordination does not exist between the meaning of the editorial itself and the title used in captioning it: "Should the Business Manager Defer to the Superintendent?" I would answer that question with an emphatic "Yes," although I am frankly of the opinion that the words "confer

[1]This article is submitted in defense of those systems of public schools operating by specific laws or by choice under the two or more independent department head system. It is not to be construed as representing the official stand or opinion of the National Association of Public School Business Officials.

*In the instruction department of the St. Louis schools, educational motion picture films are filed.*

with" should have been used instead of "defer to."

The heart or kernel of the argument appears, however, in the editorial itself where seven positive statements are made, as follows:

1. There ought to be a business manager for every large school system but he ought to be an assistant to the superintendent.

2. Policies, insofar as they affect the support of educational work, should be determined by the superintendent.

3. The business manager should report to the superintendent and not to the board of education.

4. He should receive instructions through the superintendent and not directly from the board.

5. He should have no official intercourse with the board or with any of its members except as the superintendent advises or directs.

6. *No other plan can effectively secure harmony and efficiency in the public schools in the long run!*

7. Educational policies involving financial support must be determined by the superintendent in cooperation with the board of education, and the business manager must function through the superintendent's office in relieving the superintendent of various details of business management.

Before parsing these statements and analyzing their apparent meaning, let us get clear in our minds the outstanding fact that the board of education is the representative body of the citizens themselves. It must be considered as the "absolute" power and, for the sake of argument, as a broadminded, clear thinking group of men and women. It is the duty of these men and women to digest the recommendations of the superintendent and to assume the responsibility of raising the necessary funds to carry out those recommendations. Why, then, should they not be vested with the power to appoint or elect the business agents in their school system to perform the functions of business administration efficiently and economically? It goes without saying that no sane group of board members would instruct its business agents to work contrary to the recommendations of a superintendent which the members themselves had approved. Nor, on the contrary, would it order its business agent or agents to act favorably on something recommended by the superintendent and disapproved by the board. In other words, the board of education has and probably will always have the right to approve or disapprove any superintendent's recommendations. It is the democratic principle and will continue to exist as long as American principles of government exist.

### *Revising the Editorial Statements*

Studying the specific and, I may say "stand pat" statements in the editorial in question, let me comment on them briefly and state each one as I think it should read:

1. There ought to be a business manager or business heads for every large school system responsible directly to the board of education, but the superintendent should have an assistant well versed in business details who could present the business problems of the superintendent to the board, in conjunction with the educational problems, in such a manner that there would be but little chance of disapproval or blockading. Such a plan is possible in every large school system.

2. Statement No. 2 is undoubtedly correct if I understand it aright. The superintendent is an expert in educational matters and his judgment on educational policies is or should be absolute within the limits of the financial field of the particular state or municipality in which he is superintendent. It must not be forgotten, however, that the board of education still has the power of approval or disapproval, not the independent business manager who operates at the dictation of the board.

3. Statement No. 3 is applicable only when the

*Passenger busses as well as delivery trucks are kept in the garage maintained by the board of education.*

*A drafting department, where alterations, additions and other construction activities are planned, is maintained by the commissioner of school buildings.*

superintendent is supreme. It then becomes only a department ruling or regulation.

4. Statement No. 4 comes under the same caption as No. 3.

5. Statement No. 5 is a dangerous one to make even if it was only a department regulation. The word "official" is the only thing that saves it from utter nonentity. This statement takes it for granted that executive officers and even board members themselves are subject to influence. The average executive and the board member are sincere even though they may be wrong at times.

6. Statement No. 6 is the one that arouses controversial debate more than any of the others. No loophole is left for any argument by the author of the editorial. What could be construed as a "long run"? St. Louis has effectively refuted this statement for the past thirty-four years! After all, example is the best argument and I shall outline the St. Louis plan later in this article.

7. The first part of Statement No. 7 is in the main correct but the latter part again involves the argument of absolute control for the superintendent which is the gist of this article.

I have briefly gone over the editorial statements. Such principles of absolute control by the superintendent smack of ideas laid out by purely educational or pedagogical advisers without the salt of modern business philosophy prudently mixed in. American ideals are laid on the foundation of democracy. Is a democracy or an autocracy better as the dominant force in a public school system? This last sentence sums up the problem under debate.

There is no question in my mind but that the superintendent should control purely professional school matters. Such has been conceded by all clear thinking educators. The control of teachers, principals, supervisors, pupils, books, school supplies and all other factors that have a direct and vital relationship to the educational process should be placed unreservedly in the superintendent's hands. With all this responsibility resting on him, should he be required to shoulder the added responsibility of the business administration as represented by a business manager or another officer employed and controlled only by him? I say no, by all means! Dr. Ben Blewett, late superintendent of schools, St. Louis, was an outstanding superintendent, loved and revered by thousands. He was efficient both in a business sense and in an educational sense and could undoubtedly have operated the St. Louis school system on any basis. Let me quote one of his statements made at an open board meeting a few years before he died:

"Certainly the superintendent of instruction must have demands made upon him in his special field of work that will tax all his mental and physical capacity. Any regulation that placed upon him the responsibility of administration outside

*One of the 151 educational units of the St. Louis schools is the educational museum, which has delivery facilities second to none in the United States. A corner of the museum showing the traveling library is shown below.*

*Facilitating the provision of supplies and equipment needed by St. Louis pupils are large stock rooms supervised by the commissioner of supplies. Supplies averaging in value $175,000 are carried in these stock rooms.*

of his field would weaken his efficiency in his own particular field."

Again, I might quote Superintendent Dyer, Boston, who said:

"I will say that my personal preference is neither for an autocracy in which one person is responsible for everything; nor for a bureaucracy in which no person is responsible for anything; but rather for an organization of school administration similar to the well tried and widely approved St. Louis plan, in which a few heads of departments have well defined, unmistakable and undivided authority, in the exercise of which they are not absolute, but are responsible to the board of education."

These are statements from superintendents whose opinions are worth noting carefully. There are school systems successfully run in accordance with the editorial outlined in The NATION'S SCHOOLS. 'Tis not in my mind to take credit away from those wonderfully equipped superintendents who have been able to cope with so great a burden, but we must not fail to take cognizance of the great systems operating under the other plan.

Naturally, I point to St. Louis as one, since I have been connected with it for twenty-eight years. My experience has been gained not only through my connection with the St. Louis public schools, but from personal contact with business heads of educational systems through the United States. St. Louis is not a one-man system. True, it has been favored with good school laws and a charter which, for vision and economical value, has rarely been equalled. The board of education of St. Louis recognizes the value of placing its pawns of service so as to serve the school child to the highest degree. Everything in the St. Louis schools is free, from the kindergarten through the high schools, teachers' colleges and vocational or trade schools. The pupil cannot spend a penny on his public education. Corner stores selling to the pupils from authorized lists are extinct.

*Part of the educational museum is devoted to storage of birds and animals that have been mounted.*

It operates in its system 151 educational units, among which are two teachers' colleges for the training of young women to hold teaching positions in the elementary schools; two vocational schools; seven senior high schools; six intermediate schools; 109 elementary schools; classes

at Koch Hospital, two city hospitals, the house of detention and the city sanitarium; fourteen special schools for individual instruction; one school for the deaf; two schools for crippled children; three open air schools; classes for pupils with impaired vision; an educational museum, with delivery facilities, second to none in the United States. The public school lunch rooms of St. Louis, operated on business plans, have long blazed the way for others in the same field of endeavor.

*St. Louis Plan Dates Back to 1897*

The progress and extension of the St. Louis public schools are largely due to the plan of administration in effect since 1897, when the charter under which the board now operates was granted by the state legislature. Under this charter the board of education consists of twelve popularly elected members, who are given full authority and responsibility in the administration of the schools. All executive and administrative work, however, requiring expert knowledge and detailed information, is performed by the board's officers—the superintendent of instruction, a commissioner of school buildings, a secretary-treasurer, the auditor, the commissioner of supplies and the attorney. In all there are six independent executive officers.

In the training of teachers, St. Louis occupies a position unexcelled in this country. The Harris Teachers' College provides a four-year course for training teachers for the white grade schools, and the Stowe Teachers' College is maintained to provide teachers for the colored elementary schools. Besides training teachers for the grades, the teachers' colleges offer extension courses both for teachers who wish to improve their working knowledge and for those who are working towards a degree. Classes are held after school, on Saturdays and during part of the summer.

A complete system of evening schools is open to men and women who wish to make up deficiencies in their early education, or to add to their store of knowledge along special lines.

To carry on this work requires the services of more than 3,000 teachers during the day, 642 in the evening, and 1,260 for the summer schools. The size of the problem each of these teachers has to handle may be understood by the number of pupils enrolled. The enrollment in the day school is over 100,000, in the evening schools over 20,000 and in the summer schools it was over 25,000 last summer for the regular schools and over 25,000 on the public school playgrounds.

Recognizing the value of auxiliary service to the schools, the board has provided among others the following as school aids in the instruction department: a division of hygiene to look after the health of pupils; an attendance department to keep children in school; a division of tests and measurements to assist in evaluating the progress of pupils and their abilities, and a division of books, supplies and equipment to aid in providing the schools with the necessary supplies and equipment needed by pupils in their work.

The St. Louis Board of Education spends approximately $15,000,000 each year and its funds are raised on a tax rate of only eighty-five cents on the one hundred dollars. St. Louis builds its fine buildings out of current revenue without the aid of bond issues, has practically no school debt and shows a daily bank balance of approximately $5,000,000.

For thirty-four years the St. Louis system has been operated on the independent department system and in that time no dissension or lack of cooperation worth speaking about has arisen. There is or should be no other conclusion to reach than that a well organized, efficient corps of independent officers can prove not only a benefit to a board of education representing the people but they can also make the path of the superintendent smoother and render him more valuable in his chosen field—that of educational policies.

Finally, let me say that the success of any public school system undoubtedly depends in the final analysis on the type and character of its governing board, for to this board must come for presentation and approval various policies outlined by the superintendent. With the approval of the board it becomes clearly the duty of any independent officer to execute such policies promptly and efficiently.

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## Oklahoma Governor Urges Longer Hours for Teachers

At least six hours a day of "actual work in the school" for instructors would be "reasonable," it was declared by William H. Murray, governor of Oklahoma, in his first message to the legislature, and "it would eliminate 30 per cent of the professors and mean in the end that saving to the taxpayers in cost of education."

The constitution, he said, provides that all service for the state shall be eight hours a day, "and that does not mean one or two hours a day for a teacher in an educational institution and twelve hours a day for the printer and the laboring man."

"It would seem fair," he continued, "if every person drawing a salary at the expense of the taxpayers should work as many hours a day as the taxpayers did to pay them their salaries."

# The Continuous Salary Survey—An Aid to Economic Adjustment

*A suggested scheme for automatically preventing long periods of loss in the remuneration of teachers and for ensuring them a just share in the country's economic prosperity*

By W. HARDIN HUGHES, Director of Administrative Investigation and Research, Pasadena City Schools, Pasadena, Calif.

ONE of the most important phases of administrative research has to do with teachers' salaries. Too frequently in the past, however, those responsible for school administration have taken a more or less passive attitude in the matter. Usually they have permitted the situation to develop to the critical point where the members of the teaching staff have exercised initiative in carrying on salary investigations and in making appeals to the administration for salary adjustments. The better practice is for the administration to take the initiative in salary considerations and to have in hand at all times the most reliable and up-to-date information available. The salary survey should not be a sporadic activity engaged in by untrained and prejudiced employees; it should be a regular and continuous procedure under the direction of the school administration.

The general economic situation including the purchasing power of the dollar must be taken into account in any scientific study of remuneration. It is well known that at times the dollar will buy more and at times less of given commodities and services. Wages and salaries also vary. Prices and salaries, however, do not necessarily vary at the same time and in the same direction. When prices of commodities and of other services remain constant and salaries increase, there is a real gain for the salaried person; when prices advance and salaries remain constant, there is a loss; when prices and salaries remain constant or when both move proportionately in the same direction, either upward or downward, the actual remuneration

TABLE I—INCOME PER PERSON GAINFULLY OCCUPIED IN THE UNITED STATES AND PURCHASING POWER OF THIS INCOME EXPRESSED IN INDEX NUMBERS

| *Years* | *Index of Cost of Living in 19 Cities of U. S.** | *Index of Income Per Person Gainfully Occupied in the U. S.†* | *Index of Purchasing Power of This Income* |
|---|---|---|---|
| 1914 | 100.0 | 100.0 | 100.0 |
| 1915 | 100.5 | 102.9 | 102.4 |
| 1916 | 114.8 | 121.3 | 105.7 |
| 1917 | 141.4 | 147.3 | 104.2 |
| 1918 | 172.6 | 165.8 | 96.1 |
| 1919 | 196.7 | 199.6 | 101.5 |
| 1920 | 198.2 | 221.4 | 111.7 |
| 1921 | 172.0 | 183.9 | 106.9 |
| 1922 | 167.2 | 189.7 | 113.5 |
| 1923 | 170.8 | 217.8 | 127.5 |
| 1924 | 170.0 | 220.1 | 129.5 |
| 1925 | 175.3 | 235.7 | 134.5 |
| 1926 | 173.1 | 239.2 | 138.2 |
| 1927 | 170.0 | 250.8‡ | 147.5 |
| 1928 | 168.2 | 262.4‡ | 156.0 |
| 1929 | 168.1 | 274.0‡ | 163.3 |

*Derived from data in Monthly Labor Review.
†Derived from data in News Bulletin, Bureau of Economic Research.
‡Estimate.

that the salaried person receives is unaffected.

It will be recalled that the abnormal demand for certain types of commodities brought about by the World War upset the equilibrium of production in many industrial fields and resulted in a decrease in the purchasing power of the dollar. Food, clothing, fuel, house furnishings, rents and many other commodities and services that figure in the general cost of living mounted rapidly in price after 1914 and reached a climax in 1920. Fortunately, however, the income per person gainfully occupied in the United States moved upward simultaneously, so that, in general, the purchasing power of this income was not materially reduced.

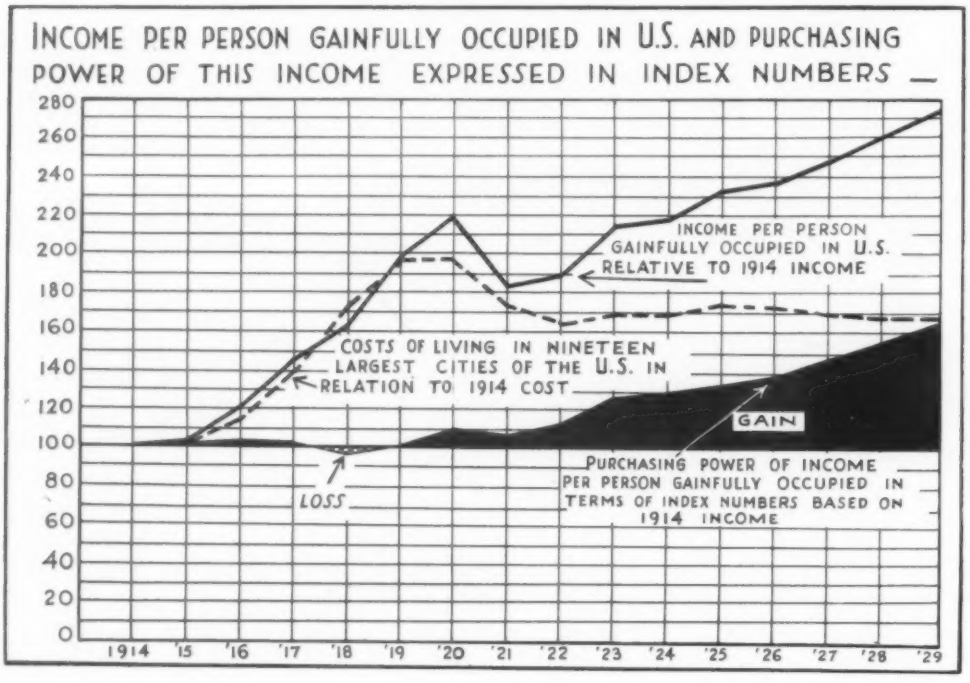
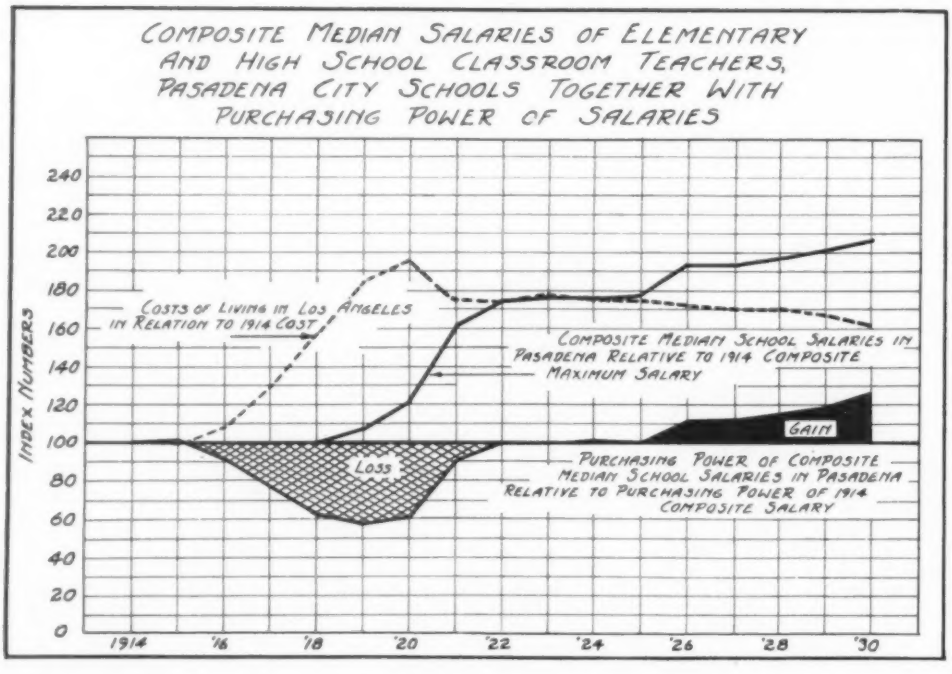



*Chart 1, at the left, shows the increase in income per person in the United States and the purchasing power of income. Chart 2, below, shows how teachers' salaries and their purchasing power have not increased equally.*




In Chart 1 and Table I these and other facts of relationship may be seen. The prices, income and purchasing power of income are expressed in the form of index numbers, with 1914 as the basic year. That is, the average cost of living in 1914 is taken as 100 and the prices in each of the other years are translated into terms relative to this number. If, for example, the price index of the cost of living in a given year is 170, it is to be interpreted as meaning that the cost has increased 70 per cent since 1914. In other words, it would require in this given year, 1924, for example, $1.70 to buy what $1 would purchase in 1914. The other index numbers may be interpreted similarly.

It should be noted, however, that after the economic slump and the sharp decline in prices in 1921 the two factors, income and prices, ceased to move together, the former advancing and the latter remaining approximately stationary. Under such conditions it naturally followed that the purchasing power of income was enhanced and the economic status of those gainfully occupied was improved. In 1929, for example, the average income of all persons gainfully occupied in the

TABLE II—COMPOSITE MEDIAN SALARIES OF ELEMENTARY AND HIGH SCHOOL TEACHERS, PASADENA CITY SCHOOLS, WITH PURCHASING POWER EXPRESSED IN INDEX NUMBERS

| *Years* | *Index of Cost of Living* in Los Angeles* | *Index of Composite Median Salaries, Pasadena* | *Index of Purchasing Power of Pasadena Salaries* |
|---|---|---|---|
| 1914 | 100.0 | 100.0 | 100.0 |
| 1915 | 98.1 | 100.0 | 101.8 |
| 1916 | 107.7 | 100.0 | 92.8 |
| 1917 | 128.9 | 100.0 | 77.6 |
| 1918 | 158.0 | 100.0 | 63.3 |
| 1919 | 185.3 | 107.9 | 58.2 |
| 1920 | 196.7 | 121.4 | 61.7 |
| 1921 | 176.4 | 161.7 | 91.7 |
| 1922 | 174.5 | 174.2 | 99.8 |
| 1923 | 178.8 | 177.5 | 99.3 |
| 1924 | 175.4 | 177.5 | 101.2 |
| 1925 | 177.4 | 177.5 | 100.1 |
| 1926 | 172.2 | 193.3 | 112.3 |
| 1927 | 170.6 | 193.3 | 113.3 |
| 1928 | 171.0 | 197.1 | 115.3 |
| 1929 | 168.7 | 200.8 | 119.5 |
| 1930 | 163.8 | 207.5 | 126.7 |

*According to Monthly Labor Review, August, 1930.

United States was 63 per cent higher than it was in 1914.

So much for the income of approximately 46,000,000 of our population. We have included in this number all persons engaged in occupations bringing a money return. Of this number 28,000,000, or about 61 per cent of all persons gainfully occupied, are wage earners; 8,300,000 are salaried employees, and nearly 9,700,000 are entrepreneurs. The last class includes all persons such as manufacturers, merchants, farmers, lawyers, physicians and engineers engaged in business or industry on their own account.

Let us consider what was happening to teachers' salaries during the period under consideration. The story is much the same whether it is based upon the situation in the country at large or upon the situation within a given city. It is true that the Eastern cities were the first to be affected. The increases in the costs of living came somewhat tardily to the cities on the Pacific Coast. In general, however, the peak in the cost of living was reached in 1920. Since that time the trends have been similar and simultaneous throughout the country.

The city that receives chief consideration in this study is Pasadena, Calif. In Chart 2 may be seen the composite median salaries of elementary and high school classroom teachers, with the purchasing power of these salaries expressed in index numbers. As in Chart 1, 1914 was taken as the basic year. The costs of living are for the adjoin-

TABLE III—SALARY SCHEDULE FOR CLASSROOM TEACHERS

| *Years of Credited Experience* | *Class I* | *Class II* | *Class III* | *Class IV* | *Class V* | *Class VI* |
|---|---|---|---|---|---|---|
| 1 | $1,400 | $1,400 | $1,600 | $1,800 | $2,000 | $2,200 |
| 2 | 1,400 | 1,400 | 1,600 | 1,800 | 2,000 | 2,200 |
| 3 | 1,500 | 1,500 | 1,700 | 1,900 | 2,100 | 2,300 |
| 4 | 1,600 | 1,600 | 1,800 | 2,000 | 2,200 | 2,400 |
| 5 | 1,700 | 1,700 | 1,900 | 2,100 | 2,300 | 2,500 |
| 6 | 1,800 | 1,800 | 2,000 | 2,200 | 2,400 | 2,600 |
| 7 | 1,900 | 1,900 | 2,100 | 2,300 | 2,500 | 2,700 |
| 8 | ..... | 2,000 | 2,200 | 2,400 | 2,600 | 2,800 |
| 9 | ..... | 2,100 | 2,300 | 2,520 | 2,720 | 2,920 |
| 10 | ..... | 2,200 | 2,400 | 2,640 | 2,840 | 3,040 |
| 11 | ..... | 2,300 | 2,500 | 2,760 | 2,960 | 3,160 |
| 12 | ..... | ..... | ..... | 2,880 | 3,080 | 3,280 |
| 13 | ..... | ..... | ..... | 3,000 | 3,200 | 3,400 |

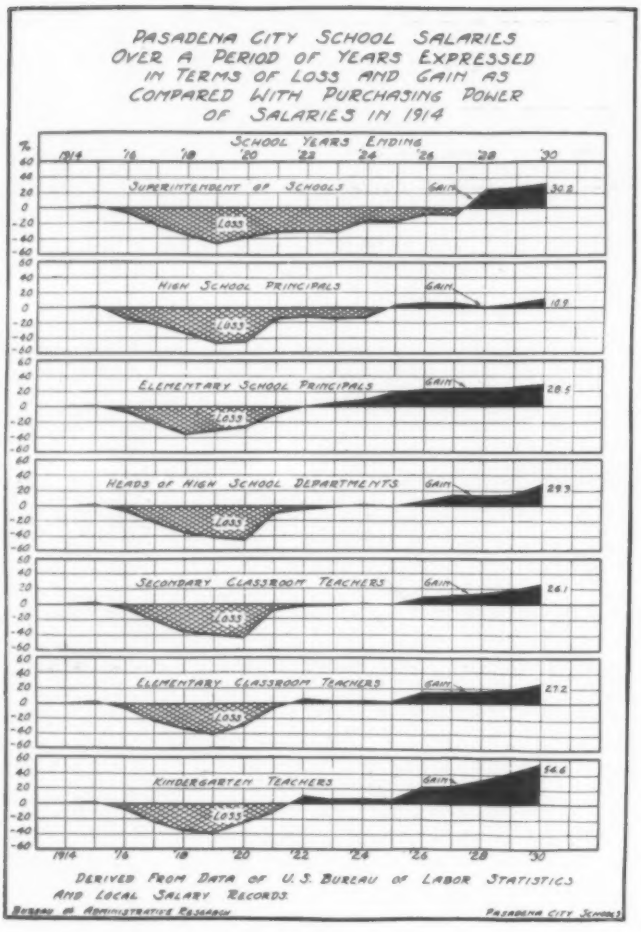



*Chart 3.*

ing city of Los Angeles, as stated in the *Monthly Labor Review*, August, 1930.

The indirect relation of salaries to the economic returns from business and industry and the inertia characteristic of all practices once they have been established, are sufficient to account for the tardy rise in salaries during the years 1914 to 1920. It will be noted in Chart 2 that increases in the composite salary of Pasadena classroom teachers lagged considerably behind the general increases in the costs of living. In fact throughout the first five years of this period salaries remained unchanged. As a result the actual purchasing power of this salary constantly dwindled until 1919, when it would buy only 58 per cent of what the 1914 salary would purchase. It will be noted that as late as 1930 the purchasing power of the classroom teacher's salary was only 26.7 per cent greater than was that of the salary she received in 1914.

### *Administrators Carry Heaviest Loss*

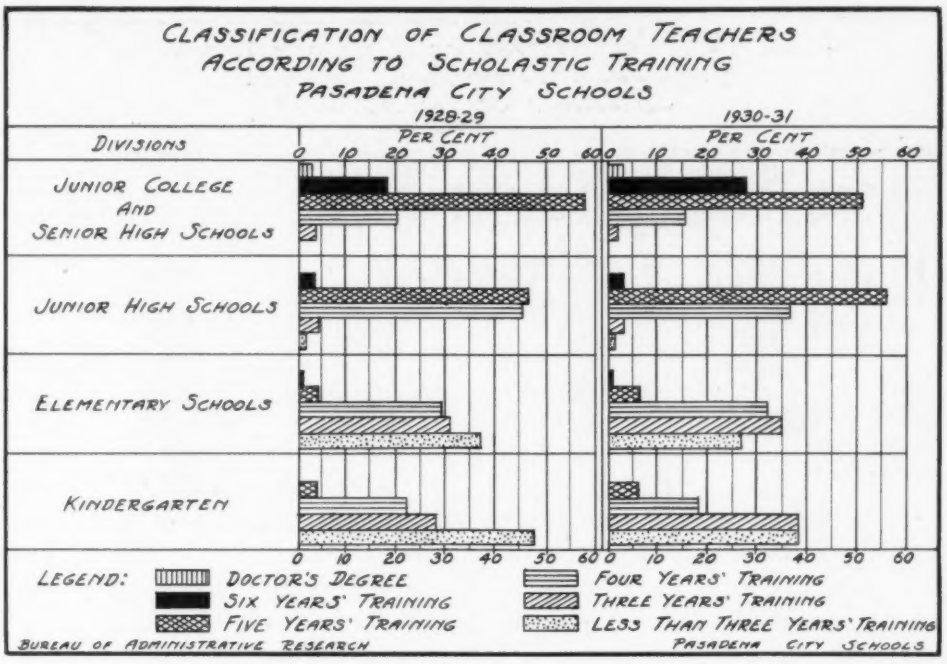
An examination of Chart 3 reveals the variable extent to which Pasadena teachers and administrators have shared in the changes of remuneration. Taking as par the purchasing power of the salary in each type of position in 1914 and calculating the percentage of annual loss or gain, we find a considerable lack of uniformity among the various positions. In every case, however, there was a period of years in which actual loss in purchasing power was conspicuous. Not until 1926 was the salary of the high school teacher equal in value to what it was in 1914. An examination of the chart will bring out the varying lengths of the unfavorable remunerative periods as well as the relative status of purchasing power in the other years up to 1930. The final gains vary from 10.9 per cent for high school principals to 54.6 per cent for kindergarten teachers. The longest periods of actual loss are for the superintendents and high school principals.

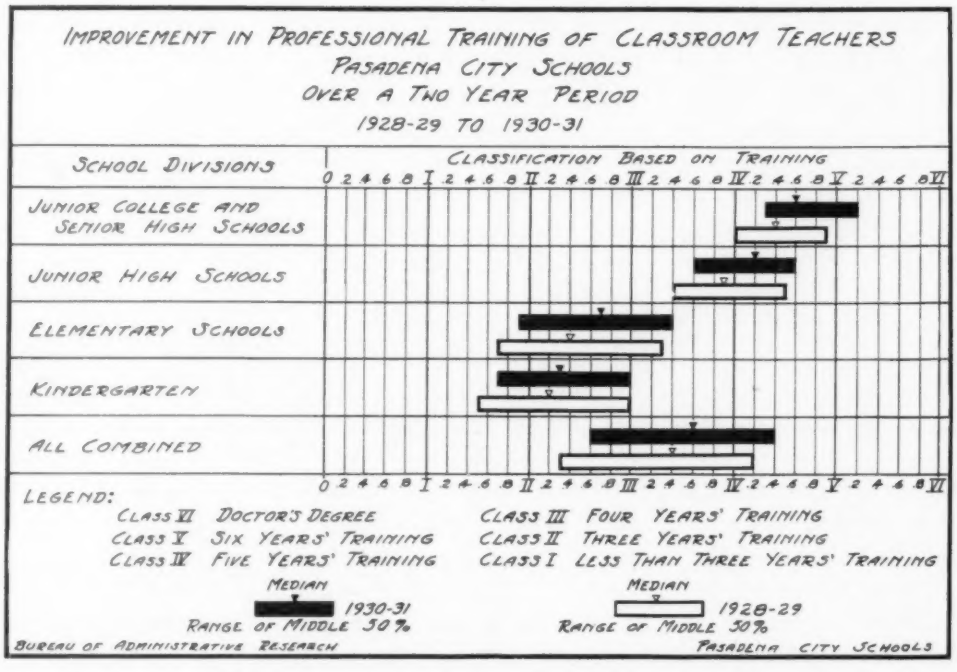
The practical value of a continuing graph like that of Chart 3 is evident. When any group of school employees is being relatively neglected in the matter of salary adjustment, the fact is graphically revealed. To go back over a period of fifteen or more years and make a complete study of this kind is a considerable task but after it is once brought up to date, little work is required to add one year at a time to the study. The year 1914 makes a suitable beginning because of the com-

TABLE IV—IMPROVEMENT IN PROFESSIONAL TRAINING OF CLASSROOM TEACHERS, PASADENA CITY SCHOOLS, OVER A TWO-YEAR PERIOD

| | Classification Based on Training | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | *Lower Quartile* | | *Median* | | *Upper Quartile* | | *Gain* | | |
| *School Divisions* | *1928-29* | *1930-31* | *1928-29* | *1930-31* | *1928-29* | *1930-31* | $Q_1$ | *M* | $Q_3$ |
| Junior college and senior high schools | IV + .0 | IV + .3 | IV + .4 | IV + .6 | IV + .9 | V + .2 | .3 | .2 | .3 |
| Junior high schools | III + .4 | III + .6 | III + .9 | IV + .2 | IV + .5 | IV + .6 | .2 | .3 | .1 |
| Elementary schools | I + .7 | I + .9 | II + .4 | II + .7 | III + .3 | III + .4 | .2 | .3 | .1 |
| Kindergartens | I + .5 | I + .7 | II + .1 | II + .3 | III + .0 | III + .0 | .2 | .2 | .0 |
| All combined | II + .3 | II + .6 | III + .4 | III + .6 | IV + .2 | IV + .4 | .3 | .2 | .2 |

*Chart 4, at the right, reveals the extent of scholastic and professional training of Pasadena teachers. Chart 5, below, shows the more detailed status and improvement in training of Pasadena classroom teachers.*





IMPROVEMENT IN PROFESSIONAL TRAINING OF CLASSROOM TEACHERS
PASADENA CITY SCHOOLS
OVER A TWO YEAR PERIOD
1928-29 TO 1930-31
SCHOOL DIVISIONS
CLASSIFICATION BASED ON TRAINING
0 2 4 6 8 I 2 4 6 8 II 2 4 6 8 III 2 4 6 8 IV 2 4 6 8 V 2 4 6 8 VI
JUNIOR COLLEGE AND SENIOR HIGH SCHOOLS
JUNIOR HIGH SCHOOLS
ELEMENTARY SCHOOLS
KINDERGARTEN
ALL COMBINED
LEGEND:
CLASS VI DOCTOR'S DEGREE
CLASS V SIX YEARS' TRAINING
CLASS IV FIVE YEARS' TRAINING
CLASS III FOUR YEARS' TRAINING
CLASS II THREE YEARS' TRAINING
CLASS I LESS THAN THREE YEARS' TRAINING
MEDIAN
1930-31
RANGE OF MIDDLE 50%
MEDIAN
1928-29
RANGE OF MIDDLE 50%
BUREAU OF ADMINISTRATIVE RESEARCH
PASADENA CITY SCHOOLS

paratively economic stability of the period ending with that year. It happens also that salary schedules in most American cities had not been recently revised at that time. Furthermore, many of the data on comparative costs of living issued by the United States Bureau of Labor Statistics are based on the year 1914.

At the beginning of the year 1928-29 the single salary principle was put into effect in the schools of Pasadena. The salaries for the various classes and the corresponding years of experience for classroom teachers are set forth in detail in Table III.

In Chart 4 the extent of scholastic and professional training of our classroom teachers may be seen. In the secondary school divisions it will be noted that unusually large percentages of our teachers have had five, six and more years of training above high school graduation. This was true even at the time the single salary schedule was introduced. In all divisions the general tendency toward better training is in evidence. The significance of the various classes under the single salary schedule is briefly indicated in the legend of the chart. The equivalent of high school graduation is presupposed in each case that has been taken under consideration.

In Chart 5 and in Table IV the more detailed status and improvement in training of our classroom teachers may be seen. It will be noted that the median gain in scholastic training (or its equivalent) for all classroom teachers of the system was two-tenths of a classification step. At this rate of gain, ten years would be required for the median classification to be advanced one step. Since the increase in salary from class to class on the schedule is approximately $200, we conclude that only about $20 per teacher each year was necessary to meet the additional costs of increased training.

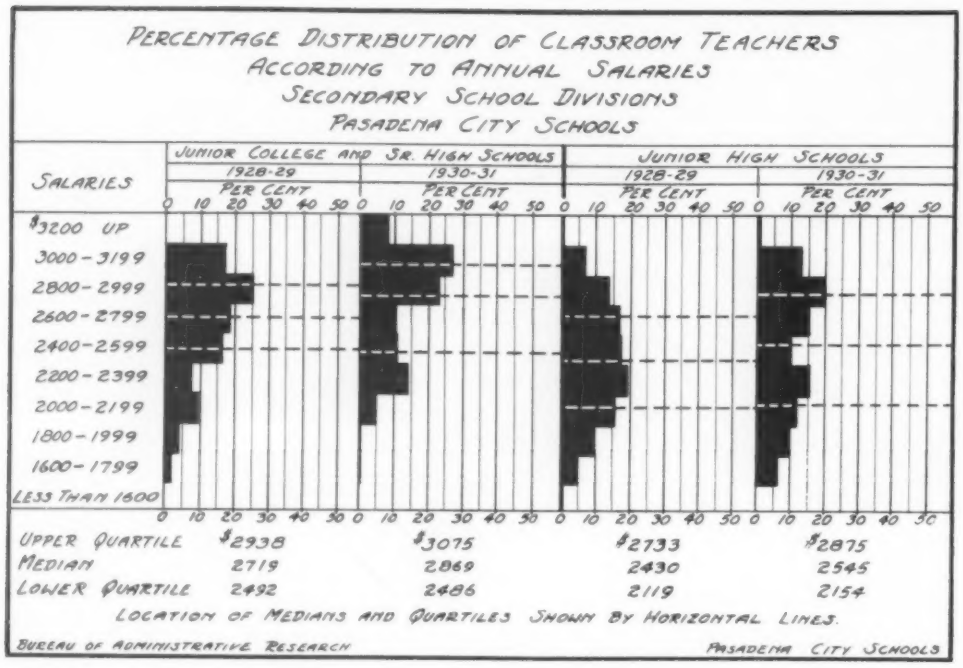



*Chart 6.*

Other interesting facts may be seen in the chart and table. It will be noted, for example, that the upper quartile gain in training for kindergarten teachers was zero. That is, those kindergarten teachers who two years ago were in the highest 25 per cent of their group with respect to training have remained practically stationary. Likewise, the best trained teachers in the elementary schools have made little gain over this period. These facts should alleviate the fears of those who have imagined that the lower divisions of our schools would be filled with high salaried teachers possessing a Ph.D. degree.

The comparative distributions of salaries for the years 1929 and 1931 are presented in Charts 6 and 7. We should mention in this connection that the improvement in salary status over this period has been due not only to additional training secured by our teachers but to certain provisions in the new schedule making double increments of increase possible each year for teachers whose salaries on the old schedule were considerably behind the new. This more rapid advancement on the schedule was to continue until salaries were properly adjusted. The greater increase in the salaries that kindergarten teachers receive can be accounted for in light of these provisions.

### *Weighing a Teacher's Training Fairly*

It will not be possible to state here the other regulations provided for the administration of this schedule. Suffice it to say that through a representative personnel committee of which the superintendent is chairman a well organized attempt is made to secure for the teaching corps all of the benefits of a fair evaluation of training. Cumulative records of professional growth in service are carefully kept in the personnel office. The forms used for this purpose have been devised to take into account not only educational preparation as indicated by credits earned in the college and university but nonacademic experience as well. The latter type of experience may include such activities, extending over considerable periods of time, as may have contributed in an important way to preparation for the work in which the teacher is engaged. Travel, published articles, books or other literary and scientific contributions are also taken into account. In every case, however, the value of the experience is carefully weighed by the personnel committee. Before deciding definitely upon the pursuit of additional courses, the teacher is advised to gain the approval of the personnel committee. This is one of the important safeguards of a well administered schedule which takes the factor of training into account. The practice is intended to reduce disappointments to the minimum and to encourage those types of training that should prove most valuable to the schools.

### *When Travel Is an Equivalent of Training*

The same care is observed with respect to the equivalents of scholastic training. In the matter of travel, for example, provision has been made that no travel within the United States shall be credited unless the travel has been for the purpose of special study or investigation. Travel in foreign countries may be credited when it is shown that it is specifically related to the improvement of the teacher's assigned work. Provision is also made that the credit allowed for travel shall not be greater than that obtainable in a standard training institution for an equivalent period.

Referring again to Charts 1 and 2, we may note the unequal sharing of profit and loss. The recipients of income in general did not, even during the critical years of the war, experience any appreciable loss. Except for the year 1918, in fact, there was a slight gain in purchasing power for

all persons gainfully occupied in our country, at a time when teachers not only in Pasadena but in most cities throughout the United States were experiencing drastic losses in the purchasing power of their salaries.

These and similar facts were used in arguments that resulted gradually in higher salaries for teachers. At no time, however, were the actual increases proportionate to the general prosperity of the country. But now, when there is a business depression, the tables are reversed. The taxpayer and not the teacher is pointing out favorable changes in the cost of living. In some cities salary reductions have already been made. In others, reductions are contemplated. In all such communities, the time is opportune for a proper interpretation of an economic law which should be permitted to work both ways. We should not delay its operation for years when salary advances are in order and then hasten its operation at the first indication of reduced costs of living. There should be written into every salary schedule a provision for general economic adjustment. A recommendation to this effect has been incorporated in the recent Pasadena School Survey, as follows: "When a new salary schedule is adopted it shall be in conformity with the cost of living in Pasadena as of the date of adoption and when, thereafter, the index of the cost of living as determined by the United States Bureau of Labor Statistics varies from the index of the last date of change in the salary schedule, either way, by an amount approximating 10 per cent, it shall be the duty of the school authorities to adjust the salary schedule to conform to the changes in the cost of living in the local community."

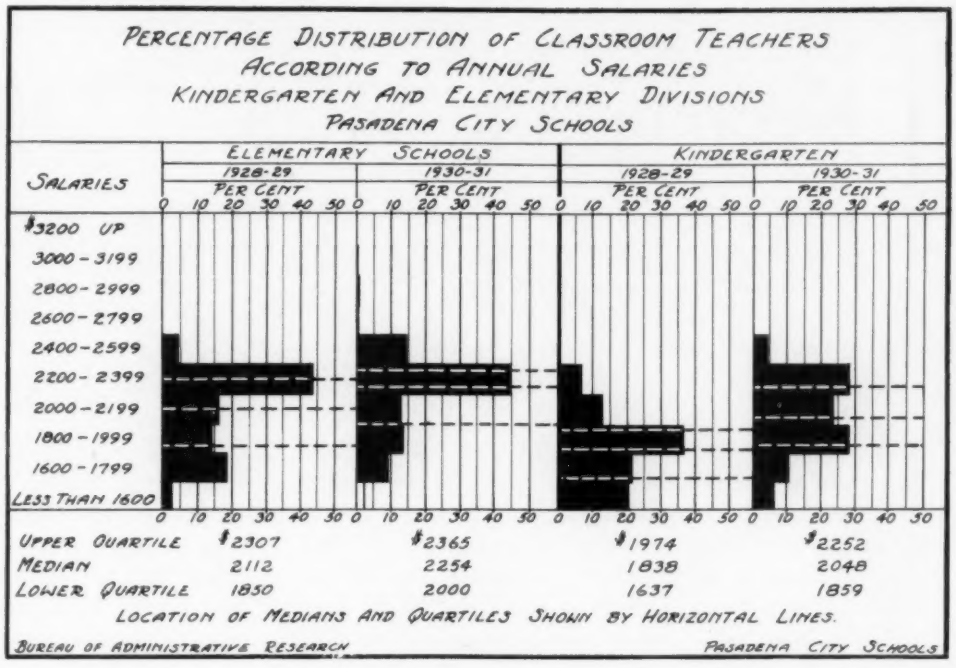



*Chart 7.*

### *Factors Affecting the Salary Schedule*

Such a provision should automatically prevent long periods of loss in the actual remuneration of teachers and should ensure for them a more equitable share in the economic prosperity of the country. Clearly this is a compromise measure but its general adoption would do much to reduce the constant bickering over salaries that so often takes place.

Not only the costs of living but also the costs of additional training should be taken into account in the construction of salary schedules. Whether or not a single salary schedule has been in operation, the scholastic training of teachers is now considerably higher than it was in 1914. The higher standards have become established both through local demands and increased requirements for certification. In California, for example, four years of scholastic and professional training have recently become a prerequisite for the elementary certificate.

### *What Price Training?*

While we have little scientific proof of the optimum training for successful teaching in elementary schools, it is generally believed by both educators and laymen that teachers with a greater amount of professional training are the better instructors. Perhaps our next step should be to determine more scientifically than we have ever attempted in the past whether this asumption is correct. But as long as we insist upon higher training of teachers we should expect to pay the bill. One principle of the single salary schedule provides for this.

No attempt has been made in this article to evaluate the merits and defects of the single salary schedule. There are, no doubt, both advantages and disadvantages in the plan. We should recognize the fact, however, that schedules bearing the same name may be fundamentally different. At present no two are entirely the same. To analyze the significant features of single salary schedules, however, is beyond the scope and purpose of this study.

# Keeping the School Floors Clean

*"Time saving" and "money saving" are words that best describe the newer methods of cleaning school building floors that are here discussed*

By CHARLES E. REEVES, Elmira College, Elmira, N. Y.

THERE is much to be said for the newer methods that have been adopted in the daily cleaning of school building floors.

The use of a dry, treated floor mop or duster is one of the best methods if conditions are right. Such conditions are a well surfaced playground and hard surfaced streets and walks which reduce to a minimum the amount of mud carried into the school building on the shoes of the pupils. The successful use of the dry floor mop also requires the proper treatment of floors with wax, a combination of wax and varnish or a combination of wax and high grade oil. If conditions are such that large quantities of mud are carried into the buildings or if the floors have not been properly treated, the dry floor mop will be ineffective in removing the daily accumulations of dirt from the floors.

The central vacuum cleaner is another means of successfully removing the daily accumulations of dirt. It is effective under even the worst conditions. Its use is of course limited to buildings in which such a cleaning system has been installed. At present there are comparatively few of the thousands of smaller buildings that are equipped with central vacuum cleaning systems, although their installation is entirely practicable for buildings of any size.

### *Methods of Daily Cleaning*

The method generally used for the daily cleaning of floors is that of sweeping them with a hair or bristle floor brush. Practically the entire floor of the modern school building must be swept every day school is in session. Classrooms that are used five or six hours each school day need daily cleaning. Indeed it is a question whether the daily cleaning is sufficient. While a more frequent sweeping of such floors might be desirable, especially in wet weather, it seems to be impracticable for classrooms, because the work cannot be performed while schools are in session and there is insufficient time for it during the noon hour.

If dustless methods of sweeping are used, corridors, stairs and some special rooms may be swept during school hours while pupils are in the classrooms. Classrooms should be swept after school, immediately after the pupils have left the rooms. There is little time for sweeping before pupils arrive in the mornings and janitors have dusting and many other duties to perform at that time.

### *How the Furniture Helps or Hinders*

Sweeping will be facilitated if the floors are kept in good condition. It is both more effective and more rapid if the floors are of hard wood and are kept lightly oiled with a good grade of oil, than if they are of soft wood, or badly cracked, checked and warped. Boards should be laid lengthwise of the room. Rows of desks and aisles should also be lengthwise. It is difficult to remove dirt if the desks are set in such a manner that the janitor must sweep crosswise of the boards.

Rooms equipped with single pedestal combination desks and seats can be more easily swept than those equipped with any other type of furniture. With such furniture there is nothing to retard the free movement of the brush, the space from the aisle to the pedestal merely serving to widen the aisle.

Four-leg combination desks and seats allow the brush to enter freely between the legs. This is also usually true of the four-leg desks with pedestal seats. Chair-desks must be moved, because the drawer under the seat is too close to the floor to permit the entrance of the brush beneath them. The movement of desks one row at a time and their later replacement make sweeping such rooms a slow process, although the results, after furniture has been moved out of the way, are unusually good. When rooms are equipped with the old style four-leg desks with four-leg seats, an impossible situation is presented to the janitor so far as sweeping is concerned. A brush will not pass between the legs of the desks and seats of such antiquated classroom furniture. Janitors have been observed "sweeping" around this furniture on

their hands and knees with a feather duster or a counter brush.

A good bristle floor brush should be used for sweeping. The bristles should be long and thickly packed. Fiber bristles are ineffective and soon break and wear out. Horsehair bristles are too pliable to remove the dirt, although the real bristles may well be surrounded by a double row of horsehair out-bristles. A good bristle brush will cost more than one thinly packed with horsehair or fiber bristles, but will give better service and will certainly last many times as long as the poorer brush.

*Getting the Best Results*

The brush block should vary in length from 14 to 18 inches, depending upon the size of the desks in the classrooms. It should be of a width at least two inches less than the distance between the desk legs, since the out-bristles will reach that distance on either side. This will permit the brush to move freely between the desk legs. For sweeping under the largest desks and seats, a brush having an 18-inch block is preferable to one having a 16-inch block. If a brush having a 16-inch block is used under large desks and seats, the number of strokes required under each desk and seat will be increased, for, even with the extra cleaning by the out-bristles, a 16-inch brush will not, at one stroke, clean all space between the legs of the desks and seats. It is usually advisable to use a brush having a 14-inch or a 16-inch block for sweeping rooms equipped with the smaller desks and seats, depending upon the size of the seats.

In sweeping corridors or vacant rooms a brush having a block not more than 20 inches in length is preferable to one having a block of 30 to 36 inches. Brushes having extremely long blocks are difficult to lift from the floor at the close of strokes, cannot be shaken free of dust when lifted and cannot be set to the floor evenly at the beginning of strokes, all of which greatly increases the number of brush marks that in the end will remain on the floor.

The brush handle should be cut to the proper length for the janitor who will use it. It should be of such a length that, when he holds it properly (with one hand grasping the end of the handle and the other holding the brush lightly, palm downward, at a convenient distance), the brush block will be parallel with, and the center bristles

*This type of brush is effective in cleaning under low desks and seats.*

perpendicular to the floor. This position represents the position the brush will be in slightly before the middle of the ordinary brushing stroke of an experienced janitor.

Brushes should receive proper care. A brush should never be set on the floor, block down, when not in use, but should be hung on pegs, block up. Hairs or bristles should be kept clean by the use of a coarse comb or a nail brush, and the handles should be changed frequently to the opposite side of the block to ensure the even wear of bristles on both sides of the block.

### *Treating the Floors*

Floors should be treated in some way to prevent dust from rising during the sweeping process. A good quality of light oil is best for this purpose, although dust will not rise from waxed floors especially if the treated floor mop is used for cleaning such floors. If the floors are oiled, only a good quality of oil should be used. This will give to the floors a golden yellow color. If the oil contains some paraffin the floors will have a hard surface. Above all, black, gummy oil should never be used in school buildings. Neither should linseed oil be used, first, because it will not keep the dust from rising, and second, because it is difficult to remove when re-oiling is needed.

Sweeping compound should be used on composition, terrazzo or similar floors of corridors and on stairs. It is needed on wood floors only when the oil has been worn away. This sometimes occurs before a vacation period at schools where the playgrounds are muddy or where the floors are used excessively. Re-oiling can occur only at vacation periods because it is essential that floors shall not be used during the process of cleaning, oiling and drying.

### *Suggestions for the Sweeper*

The following are elements in the correct method of procedure[1] in the sweeping of classroom floors:

1. The operator should sweep under desks on but one side of an aisle at each trip through the aisles. He should choose the row of desks so that the brush will be between him and the desks. In sweeping under desks on both sides of an aisle the brush must cross over in front of the operator half of the time. This shortens the reach and makes the brush work less freely because it is too close to the operator's body.

2. The operator should sweep under desks on but one side of an aisle because his body will remain in approximately the same relative position. In sweeping under desks on both sides he must continually change the position of his body and the direction of his strokes. This takes time, makes systematic and uniform strokes impossible and results in a less accurate placement and guidance of the brush.

3. The operator should always push the brush, never pull it. When the brush block is dropped farther away for the pulling stroke, it is not dropped so lightly and brush marks result. Pulling strokes also result in a thick covering of dust on the operator's feet.

4. The operator should not alternate pulling strokes under the desks with pushing strokes in the aisles. By this method dust adhering to one side of the brush will drop off when the stroke is changed.

5. The operator should not, after sweeping one aisle and under the desks, sweep dirt around the row of desks into the next aisle and along up the aisle as he cleans it. This necessitates sweeping along a greater amount of dirt on each return trip and increases the difficulty of keeping the accumulated dirt in the center of the aisle where he is working.

6. The operator should move forward while he is sweeping. Backward movement is more difficult and time consuming.

### *Sweeping by Two Men*

7. The best method of procedure is as follows: The operator should, with a pushing stroke, push dirt from under the desks into the aisle on the opposite side, choosing the row of desks so that his brush will work between his body and the row of desks. He should either push the dirt in the aisle ahead of him up the aisle, or else push it up the aisle on a return trip. These methods will save time and achieve better results.

A number of tests have been made to determine the relative time required for the sweeping of given units by two men compared to the sweeping of the same or similar units by one man. The results show that while two men can sweep a given unit in less time than is required by one man, two men cannot sweep it in half the time that would be required by one man. The following are some of the tests made:

1. Janitor B sweeps the play court. Time, 10 minutes, 30 seconds. Janitors B and U sweep the same play court. Time, 7 minutes. Assuming that Janitors B and U work with equal rapidity, the efficiency of each working together is 75 per cent.

2. Janitor B sweeps 2,824 square feet of corridor floor. Average, 113 square feet per minute. Janitor U sweeps 2,344 square feet of corridor floor. Average, 104 square feet per minute. Aver-

[1]From Reeves, C. E. and Ganders, H. S., School Building Management, pp. 117-118, Bureau of Publications, Teachers College, Columbia University.

*Corridor floors in the Alvernia High School, Chicago, are of terrazzo. If such floors are treated with a good quality of light oil or other finish the janitor's work of cleaning will be greatly simplified. Sweeping compound can be used on such floors when the oil has worn off.*

age per man, 108.5 square feet per minute. Janitors B and U sweep 2,824 square feet of corridor, working side by side. Average, 182.4 square feet per minute, or 91.2 square feet per minute, per man. The efficiency of each man working together, compared with the results when each man is working separately, is 84 per cent.

3. Janitor S sweeps the manual training room. Average, 110 square feet per minute. Janitors S and C sweep the domestic science room. Average, 128 square feet per minute. Assuming that Janitors S and C work with equal rapidity and that it is as difficult to sweep domestic science rooms as manual training rooms, the efficiency of each working together is 58 per cent.

The loss of time for each janitor, by the two-man method, ranged from 16 per cent to 42 per cent. The men were frequently in one another's way, often bumping together when they were moving backward across the room or corridor. This probably accounted for the loss of time during cleaning.

### *Summary*

A review of the preceding pages emphasizes the following conclusions:

School building floors should be swept daily. If dustless methods are used, corridors and stairs may be swept during the day but classrooms must be swept after the pupils have left.

Sweeping will be facilitated if the floors are of hard wood and are kept in good condition and if the furniture is of the single pedestal combination desk and seat type.

A good bristle floor brush is more economical than a horsehair or fiber brush. The bristles should be thickly packed in the block.

The brush block should vary in length from 14 to 18 inches, depending upon the size of desks and seats with which the room is equipped.

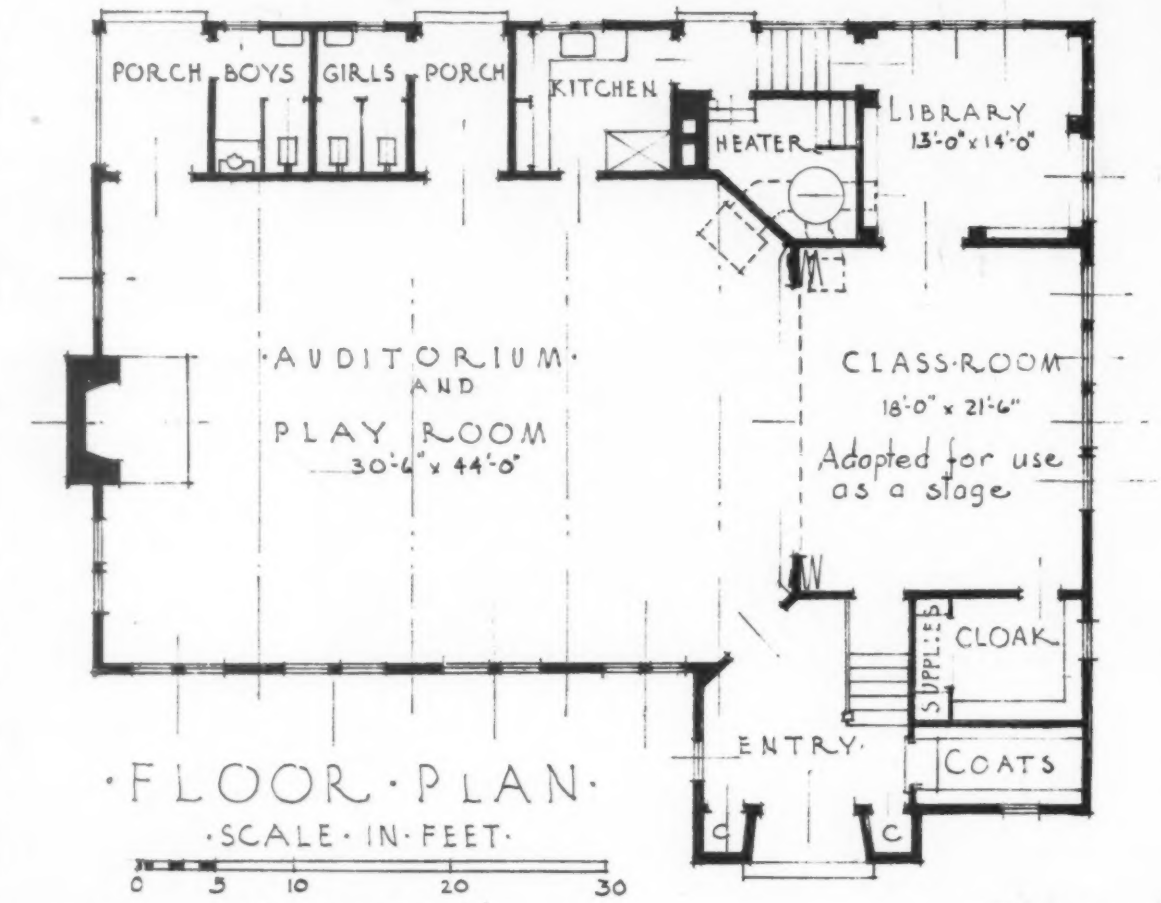
### *Proper Care Essential*

Brushes should receive proper care both to prolong their usefulness and to make possible more effective cleaning. They should be kept free from lint and dirt, hung on pegs when not in use and the handles should be frequently changed from one side of the brush block to the other.

Floors should be treated with a good quality of light oil and should be the color of yellow gold. Sweeping compound should be used on composition, terrazzo, cement and other floors of corridors and stairs, and on classroom floors when the oil has been worn off before a vacation period when they can be re-oiled.

In sweeping classrooms, janitors should sweep on but one side of an aisle, should always push, never pull, the brush, should not sweep the dirt one way in one aisle and the opposite direction in the next, and should always move forward while sweeping.

There is a loss of time when two men sweep a floor as compared with the time required for one man to sweep the same unit.

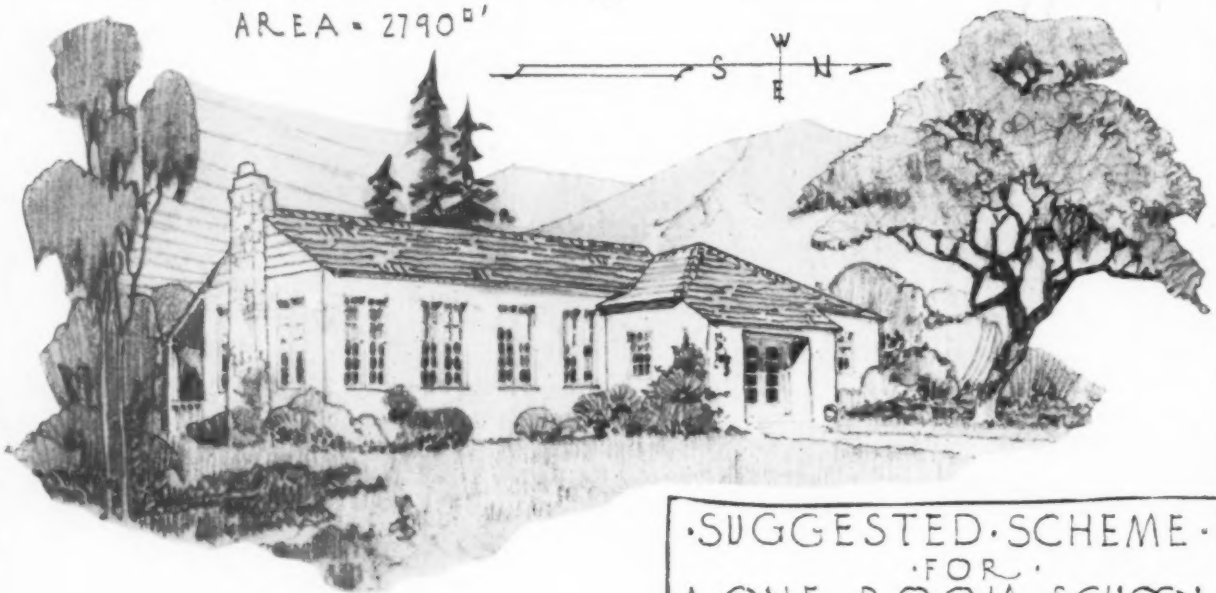



FLOOR PLAN

SCALE IN FEET

0 5 10 20 30

AREA = 2790 □'




SKETCH

# SUGGESTED SCHEME FOR A ONE ROOM SCHOOL

STATE OF CALIFORNIA
DEPARTMENT OF EDUCATION
DIVISION OF SCHOOL HOUSE PLANNING

| COST | 5 ¢ | DATE | FILE NO. E-111* |
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# Do Our Rural Schools Interpret Our Cultural Ideals?

By ANDREW P. HILL, JR., Chief, Division of School Planning, Department of Education, Sacramento, Calif.

*This department of rural education is conducted by Helen Heffernan, chief, division of rural education, state department of education for California, Sacramento, and president, department of rural education, National Education Association.*

IT TAKES a long time for an idea to develop into a reality. First it is conceived by the leaders and thinkers of its era. In its early stages it may be wraithlike and vague. It must be tested and practicalized and finally put into operation, often under trying conditions. Eventually it is accepted as contemporary practice.

In this chain of development the last expression of an idea is the planning of a building to interpret it. If the interpretation is well conceived, the building will intensify the program it houses; it will inspire its occupants, gather and correlate its activities and organize the program into a dynamic synergy.

### *Wherein the Country School Is Lacking*

The usual rural school, however, is not built around the latest ideals of education. Conversely, it is much more liable to express the commonplace or the traditional. Particularly is this so when the local community is responsible for leadership. The local board has little or no connection with the latest educational ideals, little background to help in evaluating them and almost no opportunity to see them in operation. Because of this condition and because of low wages and inconvenient living quarters, the rural teacher does not measure up to the urban model. As a type she offers little or no leadership to her board, and in about 80 per cent of the cases with which I have had experience she is not consulted in respect to new building needs. If we add to this situation the financing of rural buildings out of meager district valuations, the hopeless picture is complete. The primal steps in procuring modern rural schools, therefore, consist in securing administrative units large enough to ensure competent educational leadership, enough funds properly to maintain the schools and an adequate source of income for school building projects.

Because expression in the form of a building is the last step in the emancipation of an idea and because buildings have a life of from forty to eighty years, educators should be particularly alert in evaluating the best practice of to-day and translating it into building conceptions. In this way a great many of the misconceptions and untruths of traditional practice can be discarded, and to-day's investments in capital outlay guaranteed useful to coming generations.

Let us consider the cultural implications of the rural school. The American school is democracy's expression of leadership. Through it we hope to interpret and appraise our civilization. In it our younger generations live, experience and evaluate. Out of it we hope to develop men and women of character and individuality.

### *Initiative Needed to Meet Modern Needs*

This is not a conception of a school concerned primarily with reading, writing and arithmetic. It conceives of school rather as an environment, an experience, dealing with life and ideals. For this reason it cannot successfully teach hygiene in the midst of slovenly janitor work; it cannot teach organization where there is little to aid organization, art where the building and site are a denial of everything artistic, or love of flowers where no flowers grow. Culture is no longer a matter of books; it is the living of a well balanced meaningful life. Our usual rural school is not an interpretation of the program we have just described. It has been copied rather than conceived.

No other type of building is so steeped in tradition. Scattered over our country there are thousands of one and two-room buildings patterned on the same old-fashioned design. This lack of originality is not limited to the building arrangement only. It includes poorly chosen sites, apeing of questionable architectural details, carelessness as to orientation and an almost universal lack of appreciation of why a school should have a garden and how the garden may be planned to be practical and inexpensive.

### *Selecting the Site*

The setting of the modern school should be attractive. A background of tall trees is often desirable. Native trees are generally preferred to imported varieties. Usually the school should be relatively near the road. Small schools may be placed as near as 30 feet to the front property line, provided the prevailing breeze blows from the building towards the road and the traffic is not heavy. A relatively small setback makes it possible to have a garden of moderate size, which the school can afford to maintain. This little plot should be skillfully landscaped by an expert, and the lawn, shrubs, flowers and trees selected for variety and suitability to the climate. Informality in the garden is usually desirable, so that flagstone or similar walks are much preferred to hard, straight or stiff ones.

Rural school sites should be selected with care. When two or more villages are involved the school should be in the largest center or in the village likely to become the largest. Schools situated between towns are often a wasteful compromise since later development may see one town grow large enough to support its own school, leaving the other stranded with a school out in the country. The character, condition and direction of approaching roads should be carefully gauged. When the district does not contain towns or villages, the present and probable future population centers should be studied. When barren, rocky or desert land comprises one end of a district, location in a geographical center might not be practical.

A residential neighborhood should be selected if conditions permit. A site near poorly kept dairy farms, stock corrals and the like is to be avoided because of sanitary conditions. The noise of highway traffic, fumes from slaughterhouses or canneries, quarries, rock crushers and gravel pits near the school are all objectionable.

The ideal site will permit the rooms to be correctly oriented when facing the front garden. This will obviate the need and expense of window guards. The approach to the school should receive some consideration, and if attractive views from the building can be secured at no sacrifice to functional needs, they are most acceptable. The availability of public utilities is often an important factor, as gas, water and electricity are desirable in the modern school. Whether the water comes from a well or from another source, its purity, volume and pressure should be guaranteed. In one-room schools the underground circulation should be in pipes not less than 1½ inches in diameter, with a pressure of not less than 30 pounds and fire hose outlets inside and outside the building. This volume and pressure should be maintainable for at least fifteen minutes through a 100-foot fire hose with a ¾-inch nozzle. The pressure at the nozzle will vary from 18 to 20 pounds.

Several factors governing the size and form of rural sites demand attention if intelligent selections are to be made. In a restricted mountain area where population growth seems impossible, one-room schools may be erected on 1-acre plots. In normal situations, however, 3 acres should be provided, and where growing towns are involved a site of 5 acres may be chosen as a precautionary measure. The requirements upon which the 3-acre minimum site is predicated are: space for a ball diamond, 1 acre; other play areas, about 1 acre, and space for school, garden and parking, 1 acre.

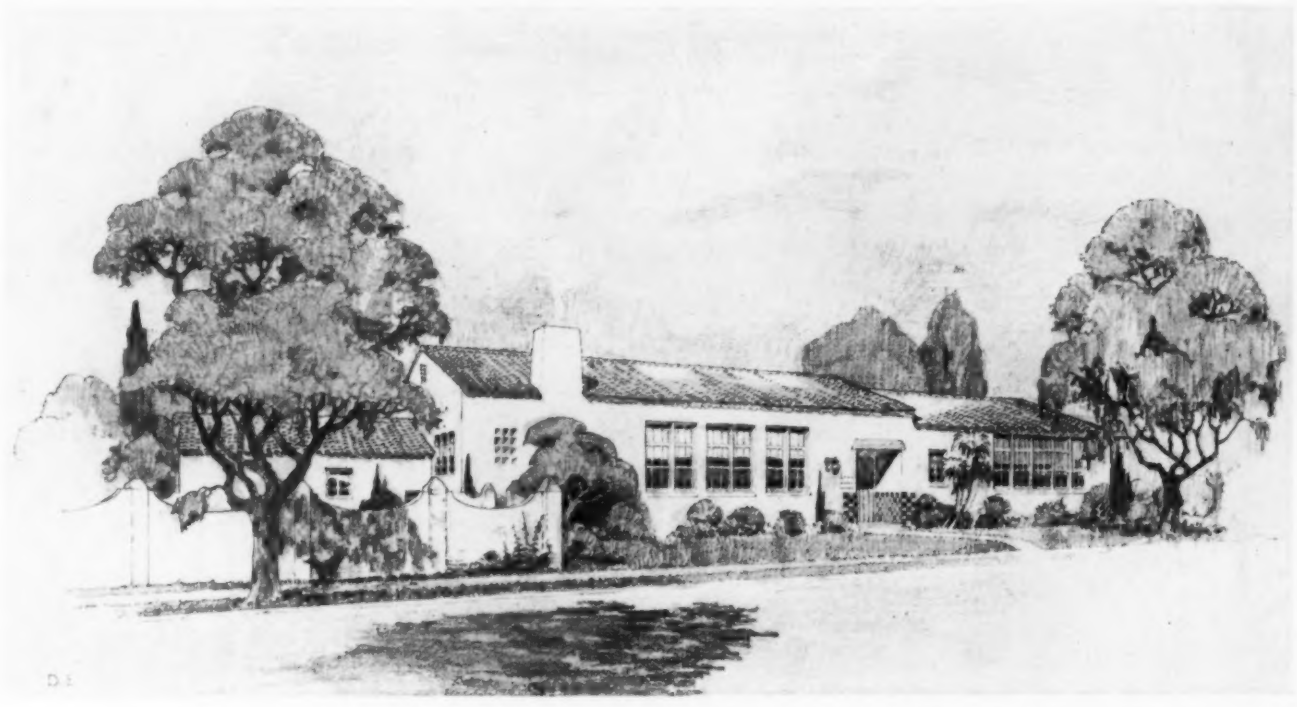
School boards should be hesitant in purchasing land of uneven contour. Undulating land often makes it impossible to control the building's setback; it makes garden areas too large for the district's finances, requires too many walks and roads which are expensive to maintain or demands an exorbitant amount of fencing or abnormal drainage projects. This is not to say that uneven contour in the right place is undesirable. A picnic grove or a nook in a small valley or arroyo is often desirable. Primary children enjoy an informal, uneven playground. In the main, however, the major play areas should be as nearly level as good drainage permits.

### *Layout Should Be Carefully Planned*

A site that permits entrance from the front and from the side or rear is often convenient for pupils living near the school. No school site should be chosen without first making a site layout, showing building placement, orientation, garden areas, parking areas, major play areas, special play apparatus and primary children's playgrounds.

Many rural school sites have the schoolhouse in the exact center of the plot, which spoils the play areas and provides too great a front setback. In some prominent spot the toilet outhouses an-

nounce themselves with undeniable frankness. In another place, apparently by happenstance, we find the pump or tank house. Then someone is reminded of the need for a fuel shed, and a fourth outbuilding blossoms forth. Any of these may be in the front yard. Scattered among them, one may find a good selection of pipe rail play apparatus. Additional rooms are more often added as separate units than as extensions of the original building. These conditions may be avoided by a careful study of rural school sites and site layout.



*This type of rural school will give its pupils all the advantages of modern education.*

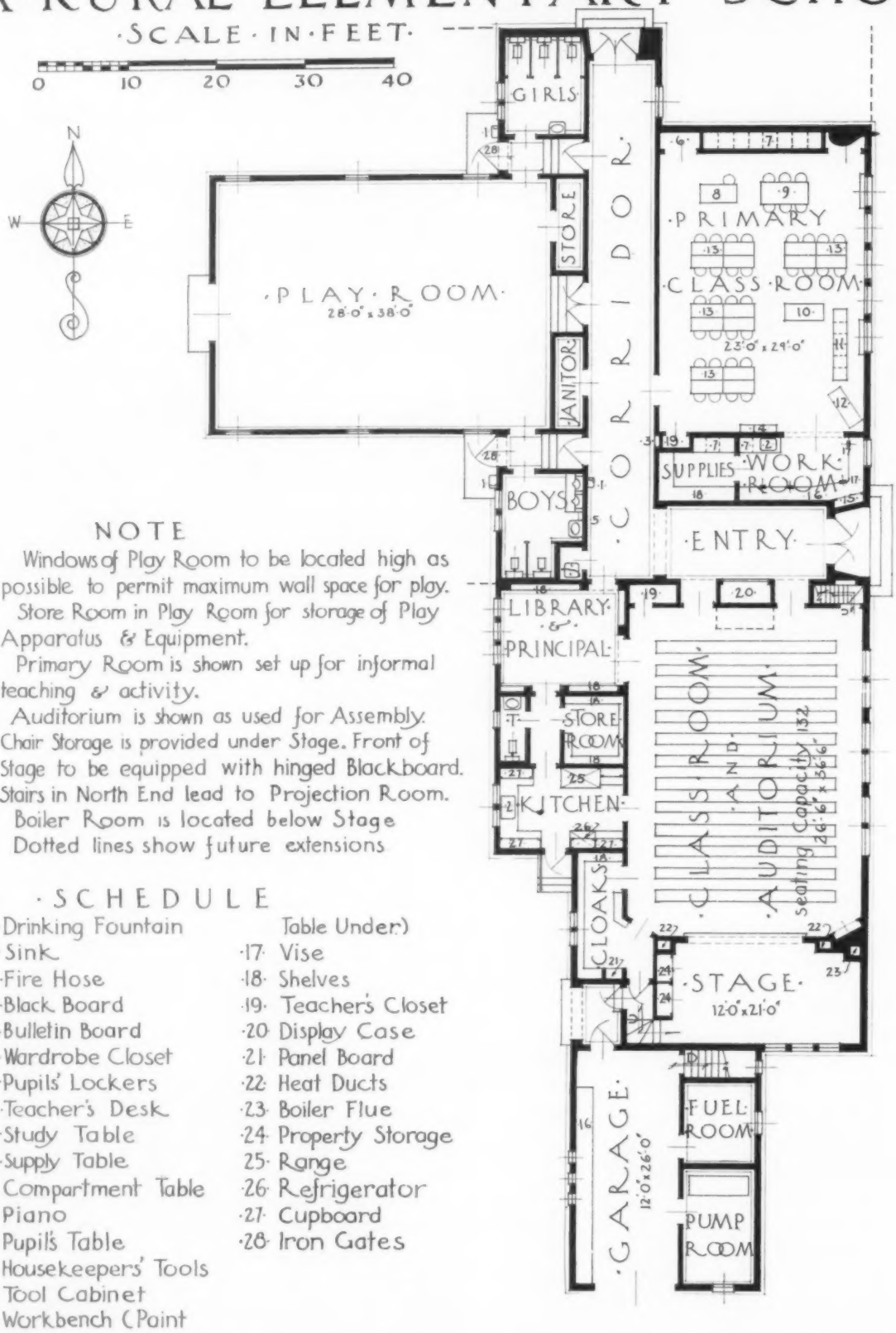
Architecturally the typical rural school is stiff and formal. Amusing attempts at the monumental type are not uncommon. Inside we find the inevitable "standard classroom" furnished with mechanically arranged seats, each with its cubbyhole large enough to house the self-sufficient textbook but utterly unadapted to modern work and illustrative materials. The dignity and importance of the teacher may be expressed by her desk enthroned upon a platform, and if the school is "really modern" a pinning strip well out of the reach and sight of the pupils may encircle the room above the blackboards. This is a perfect picture of what education stood for thirty or forty years ago: a monumental building to impress the children and the taxpayer; a formal schoolhouse, because education was unnatural and unrelated to living.

To-day's school buildings should reflect the informality of to-day's educational program. Thus the exterior design will evolve from the functional needs rather than will the needs be stuffed into an inelastic classic shell. After the general form has developed, it is the architect's task to embellish it with details on the plane of the child's understanding. Some of the roof lines may slope down until they are almost playhouse height from the ground, and on the end of the school devoted to primary classes, a playhouse opening to a classroom and the playground may be included. A wide terrace overshadowed by branching trees is valuable for play and for instruction. Pergolas and porches are also of value. Decorative elements that children can understand and love will help bring the building down to them. A little dwarf gargoyle, a nursery rhyme in a tiled panel, beautiful color or other things of interest to children, worked into a design, appeal to the child's mind.

Schooling nowadays does not stop with the classroom. The outofdoors offers a great diversity of educational activities and first-hand experiences. These interests may be encouraged by a bird house, surmounting a low gable, a bird bath in a quiet spot, a glasshouse corner where plants may be grown, a small fish pond, potted plants, flower boxes or a beautiful garden. Such an environment sets the stage for personal explorations in new and enticing experiences. Children play with intensity, however, and there must be a place for unrestrained activity.

Commercial play apparatus is desirable in some respects, but no opportunity to create safe play facilities by means of a bar between two trees or a ladder up to a low horizontal limb should be lost. When the final significance of the deformali-

# FLOOR PLAN OF A RURAL ELEMENTARY SCHOOL




## NOTE

Windows of Play Room to be located high as possible to permit maximum wall space for play.

Store Room in Play Room for storage of Play Apparatus & Equipment.

Primary Room is shown set up for informal teaching & activity.

Auditorium is shown as used for Assembly. Chair Storage is provided under Stage. Front of Stage to be equipped with hinged Blackboard. Stairs in North End lead to Projection Room.

Boiler Room is located below Stage

Dotted lines show future extensions

## SCHEDULE

1. Drinking Fountain
2. Sink
3. Fire Hose
4. Black Board
5. Bulletin Board
6. Wardrobe Closet
7. Pupils' Lockers
8. Teacher's Desk
9. Study Table
10. Supply Table
11. Compartment Table
12. Piano
13. Pupil's Table
14. Housekeepers' Tools
15. Tool Cabinet
16. Workbench (Paint Table Under)
17. Vise
18. Shelves
19. Teacher's Closet
20. Display Case
21. Panel Board
22. Heat Ducts
23. Boiler Flue
24. Property Storage
25. Range
26. Refrigerator
27. Cupboard
28. Iron Gates

zation of the rural school is recognized, we may see a slide designed as a part of a building or a sidewalk marked off for hopscotch and other games. With a clear understanding of his objectives, an architect can design a bus shed, using the rear wall for handball or tennis practice, and can actually make it beautiful. In medieval times man had the knack of making utilitarian things beautiful. In this respect at least we are culturally behind our forefathers of the Dark Ages.

*Carrying Beauty Into the Schoolhouse*

The interior of rural schools seldom harmonizes with our cultural ideals. If the building is English half timber outside, we seldom find adherence to this style on the inside. Concessions, however, are made. There are the Winged Victory of Samothrace and the Venus of Milo. These statues were art in their original setting. It is sacrilege to mix them with the sordid and the common.

Consistency demands, at least, that the interior of a building be treated as a part of the whole. Proportion, color and the artistic development of functional features are needed. We have seen display cases that added quaintness, beauty and charm to a building. The lobby floor, at least, may be designed for individuality and attractiveness. And with all the opportunity doors afford for the development of architectural charm, one might expect that they at least would be original.

There is need for less formality in classroom furniture and for study of room arrangements to permit quick changes from one activity to another. Provision should be made for the facilities needed for various activities and there should be adequate storage space designed to house the types of materials used in the several grades. These interpretations call for constructive designing ability.

The modern school, then, should be designed as a unit or a group of units. Assuming it to be properly oriented and rationally related to its approaches, garden areas, school gardens and play areas, we must check the design further to see that: (a) delivery facilities are provided to the engine room, the storeroom or receiving room and the domestic art or manual arts quarters; in very small schools, deliveries must often come to the office; (b) toilet facilities are arranged conveniently and practically on a level with the play areas of each sex; (c) extensions may be easily and properly made; (d) it is consistent throughout in design; (e) its rooms are a real interpretation of to-day's educational ideals; (f) its interior arrangement is well conceived; (g) the building is adaptable as a community center.

This article has stressed the cultural aspects of these items mainly because America's fetish for freedom implies a need for the development of a civilization that will not abuse freedom. America's rural schools have been too much interested in developing knowledge without preparing the individual for the responsibilities he must assume if society is to remain healthy and vigorous.

To-day we have reaped three results: Because our knowledge is bookish and formal, the proportion of rural children attending high school is less than half of that in cities; the rural child's adjustment to high school and college education is difficult because his experience has been thus formalized, and lastly, when he does attend college, his transformation into a useful citizen is left to the chance connections and acquaintances he makes there rather than to the eight years of fundamental character training in the elementary school.

The ideals of rural school planning expressed here are depicted in the accompanying illustrations. Functional adaption to school needs, cultural consistency in plan, architecture and garden and an interpretative recognition of the school as a child's environment are the major principles recognized.

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## What Physical Educators Should Strive for

Physical education directors are calling attention to the objectives of the American Physical Education Association that were adopted and approved by the recent White House Conference on Child Health:

A gymnasium and playground for every school.
Opportunities for scouting and camp craft.
Equipped and supervised summer playgrounds.
A graded and scientific curriculum.
A medical examination for every school child.
A class period in physical education each day for each pupil.
Standardized physical achievement tests.
Academic credit for physical education work.
An intramural program for after school hours.
An athletic program for girls planned and administered by qualified women, stressing girls' rules for girls' activities and games and types of competition adapted to age, capacity and interests.
The teacher fully trained and accredited.
The coach a member of the faculty.
Education for leisure.
Health habits that endure.
A program that stresses sportsmanship and ethical conduct.

# The NATION'S SCHOOLS

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# Editorials

## A Troublesome Problem in School Administration

A GROUP of school principals meet occasionally for the informal discussion of their everyday problems. The subject of the school janitor is never brought up without most members of the group confessing that the janitorship is an ever present problem and one that is apparently unsolvable. Some principals get along better than others with their janitors, but there is not one who feels satisfied with the janitorial service he is receiving.

After having listened to repeated complaints about janitors from principals and superintendents who are not given to fault finding, an impartial observer interviewed a few janitors in positions of low and of high degree He found that these men do not feel that they occupy positions in a school system comparable with the teachers, the principal or the superintendent. They think their work is inferior, is in fact degrading, and they are not encouraged to play an important rôle in making the educational machinery run smoothly and economically. Practically all of the men who talked freely about their work gave evidence that they were in a more or less defensive attitude toward teachers, principal and administrators—not openly or rebelliously, but nevertheless actually and influentially. They do not feel that they can be companionable with their superintendents, principals, teachers or even with the pupils.

None of the men interviewed had received special training for his job, although most of them had listened to talks concerning one or another phase of the work of janitor. They are all untrained men. They were for the most part picked up by members of the board of education or by the superintendent. They have no professional feeling whatever. The janitorship is not, so far as they regard it, a profession any more than digging a ditch is a profession. The janitor, speaking generally, regards his work mechanically and is not stimulated by professional ambition.

The janitorial problem cannot be solved until the janitor looks upon his position as a profession. This means that he must receive special training. A janitor must think better of his profession than one did who was interviewed and who, when he

was asked whether the janitorship ought to become a profession, remarked: "Well, I suppose I ought to be made Professor of Dust and Ashes." A man who thinks of his job as being concerned principally with cleaning up dust and ashes cannot contribute much to the smooth and efficient operation of an educational plant.

The board of education ought not to appoint janitors. The superintendent or principal should make the appointments. A janitor should never be chosen unless he has been carefully looked over with a view to discovering his personal traits and his general makeup. The janitor is seen as much about the school building as the principal or any teacher. He comes into contact with pupils and with teachers more intimately, or at least more frequently, than does the principal. He should make a good impression because of his appearance and his personality. He can and does exert an influence for good or for ill upon pupils, especially upon the boys in a school. He ought to be a man who can give boys the right slant in respect to some matters that teachers or a principal are not given an opportunity to handle. A janitor ought to be a friendly man whose advice to pupils as he comes into contact with them in situations somewhat different from those presented in the classroom, or on the playground even, will be well received and followed. The janitor ought not to be primarily a headsman. He certainly ought not to be an object for ridicule by pupils because of his appearance or his traits.

It is not necessary to dwell on the need of technical training for janitorial service. A janitor is, more largely than a superintendent or a principal or a teacher, a custodian of school property, including often elaborate and expensive equipment. He is the custodian, to some extent, of the health of pupils and teachers; he should have expert knowledge of the proper temperature, ventilation, humidity and cleanliness of a school building. He should play an important part in eliminating disturbances in a school building so that teachers and pupils will not be irritated or distracted. One janitor, who goes blustering around the building of which he has charge, slamming doors, fussing with windows and generally making himself a nuisance, says that his duties require that he be active in ways that are annoying. If he had the right feeling about his function and some knowledge of how to help make school work run smoothly without distraction, he could follow a program so that he could do his work and not disturb teachers and pupils.

There is no remedy for the situation except to professionalize the position of janitor and to put appointments in the hands of superintendents or principals. Then, the janitor must receive special training that will take him out of the class of picked up, untrained day help. A janitor must be helped to overcome his feeling of inferiority, and especially his defense reaction against administrators, teachers and pupils. This is not an unattainable ideal. Minneapolis has already attained it, and reports are coming in to the effect that other communities are about to adopt a new régime for training and selecting janitors.

N·S

## Comment and Counsel From an Elder Statesman

READERS of The NATION'S SCHOOLS who have been following William McAndrew's comments on policy making in American education—and are there any readers who have not been following them?—would not feel kindly toward the editors if they did not make an attempt to provide for continuance of Mr. McAndrew's enlivening and illuminating comments on educational problems and procedures. Happily, we are able to announce that, beginning with the current issue, Mr. McAndrew will conduct a department in which he will offer each month in his inimitable way comment and advice to those who are charged with the administration of education, whether public, private or parochial.

Education has not heretofore taken advantage adequately of the wisdom of its elder statesmen. The NATION'S SCHOOLS will in presenting Mr. McAndrew's comments each month inaugurate a program that we are sure will be appreciated by our readers. He has been given a roving commission to discuss informally any question of interest to educational executives. The Sage of Connecticut is peculiarly well qualified by training and experience and very well situated to look over the educational arena and suggest to the warriors ways and means of avoiding needless conflict and of achieving success in their endeavors.

N·S

## Education and World Unity

SILENT forces are at work tending to develop understanding and peaceful relations among the peoples of the world. The New Education Fellowship is one of these forces, though it is working so quietly that even well informed educators are not aware of the increasingly important rôle that it is playing in breaking down prejudice and hostility.

The aim of this organization is to disseminate

knowledge regarding the so-called "new education," so that all the nations may take advantage of the experiences of any one nation in developing newer types of education that train the younger generation to think straight regarding the conditions and relationships essential for the well-being of humanity, whether in Germany or in Japan or in America or in any other nation. Most of the progressive peoples of the world are represented in the fellowship. They are leaders in their respective countries. There is extraordinary unanimity among them concerning the essentials of an education adapted to the needs of youth in the modern world.

Added to the growing influence of the New Education Fellowship is the benefit that is flowing from the interchange of students and teachers between the nations. American educational foundations are playing an important part in financing these undertakings designed to develop international good will. The great international educational organization that will meet in Denver in July is a power for good in bringing the nations closer together through the adoption of fundamental educational principles and procedures and the elimination of prejudiced, narrow-minded nationalistic education.

It is probably not going beyond bounds to say that more is being done at this moment through education to promote unity and good will among nations than is being accomplished by all other agencies combined. If this work can go on unimpeded for one generation there will probably be developed among the peoples of the world a mutual understanding and an attitude toward one another that will make resort to arms difficult or impossible.

## A Department of Home and the Child

ACCORDING to the Associated Press there will be presented at the next session of Congress a bill designed to create a new department in the Government, with a cabinet officer. This department will be entitled "Home and Child." All Federal activities having to do with child welfare, child training or education of any kind or degree will be concentrated in this department. It is believed by those who are sponsoring this movement that the home and the child are of as great importance as commerce, or agriculture, or war, or any other interest or concern that is safeguarded or promoted by the Government.

Probably no one will deny that the welfare of the child is of sufficient consequence to warrant support by Federal, state and local governments. But it is doubtful whether the establishment of a department of home and the child will best attain the objective of advancing the physical, mental, social and moral well-being of our children. It seems to us that the welfare of the young is promoted more largely to-day by agencies outside of the home than within the home. Ideally, the home should play the chief rôle in the care and culture of the child, but actually it is not playing the chief rôle in American life. The school has become a more vital factor than the home in child life. The home as a welfare and educational agency has been constantly declining in America, and the school has been just as constantly increasing in the scope and intensity of its influence. It is doubtful whether legislation could restore to the home the place that it occupied in training the young four or five decades ago. Such profound changes have occurred in our social organization and in our mode of life that the home cannot regain the prestige in training the young that it held in an earlier day.

The NATION'S SCHOOLS wishes to see a department established in the Government that will be devoted to the promotion of the physical, mental, social and moral well-being and training of the young. This department should enjoy all the privileges and all the power that are enjoyed by any other department. But it should be a department of education and child welfare rather than a department of home and the child. Educational agencies outside of the home will in the future play an even more important rôle than they are now playing in the direction of child welfare and child training, and a department of the Government should have in view principally the promotion and the maintenance of these educational agencies. The home should be regarded as one of the agencies, but only one. Moving and talking pictures should be regarded as potent agencies in influencing the social and moral development of the young. The public playground, the school garden, organizations like the Boy Scouts and the Girl Scouts, summer camps, are all playing a part in affecting the welfare and training of the young. These are all educational agencies and so far as the Government is concerned they should be dealt with as educational forces. Whether we like it or not, whether we approve of it or not, the home is not the dominant agency in America that is determining the development of the young for good or for ill; and in establishing a department in the Federal Government to promote child welfare and education we should not assume that the home is or can again be made the most important influence.

# *Happy to Say*—By WILLIAM McANDREW

THERE is a young gentleman named Edward Fuller, superintending the schools of Darien, Conn., who printed on the program of a teachers' convention, "Our speakers are our guests. Connecticut courtesy and hospitality require that we fill the front seats. One may do his share toward the reputation of our state and profession for good breeding by choosing, each his place, so that there is nothing vacant in front of it."

SO MANY times have I heard an educational meeting preceded by the chairman's advertisement of backwardness, "Will those in the rear please come forward?" that always I expect to hear it.

THEY say that the managers of prize fights do not have to coax the spectators into the front seats.

YOUNG doctors at a clinic, architects, engineers, lawyers, never need urging to come forward.

A SPITEFUL critic might say that we school people, sitting far back, show no morale or professional interest.

THE back seat habit is not deliberate rudeness; neither is it entirely due to the contempt of teachers for their calling or the indifference to those on the platform. It is thoughtlessness.

THE planner of the program can cure this. He is the chief host. When the invited guest comes to his house he must not let his family run away to the back yard.

YOU ought to see Joe Richey of McKeesport, Pa., open a meeting. He has as many young girl teachers as anyone has, but they have a hearty pride in their meeting manners. Joe says to them, "I have a letter from the speaker we had at the last assembly. He wants me to thank you for the courteous and appreciative hearing you gave him—nobody whispering or fidgeting." Then Joe adds, "This has made me proud to be associated with teachers who reflect high credit upon a very respectable service."

ADD correction to a fault and you get zero, but compliment cancels errors and adds a virtue.

THE two riskiest situations for a schoolman's manners I recall out of my sixty-three years among teachers are: the bout with an angry parent and the controversy in a public meeting.

WE should have demonstration lessons for teachers in the art of treating *parens iratus*. Get points from the department stores. To irritate a customer is an unforgivable sin. A mother is as important to a school. Without parents we would go bankrupt for raw material. It is good for you to avoid correcting a parent. You needn't prove her wrong or yourself right. The main thing is for her to learn that you are good mannered.

THERE is a vocabulary for use with parents. "No reflection on yourself or your home management was intended." "I am sorry you should have thought so." "You have had more experience with the boy than I have. What would you have done?" These are courtesy weapons. Any mother worth having will defend her own. This is so respectable that you will gain by praising her defense. If she demands an apology, get a friendly adviser into the game—a principal if you can depend on him or a near-by teacher—and ask if you think that an apology to the boy is advisable or is good for him. The main thing is that milady shall get no peg on which to hang an allegation that you have been discourteous to her.

NOTHING seems to please an ordinary newspaper more than to headline rudeness in a gathering of women or teachers. Papers everywhere chronicled at exuberant length the uproar following the foolish attempt of a Jerseyite to inject a resolution favoring booze into the superintendents' convention in Detroit.

WHAT the journals made the most of was the disorder of educators.

THE late Eli Rapp, beloved of Pennsylvania, said to teachers, "You gotta be polite even when punishing."

WE made fun of Eli. All the same, you owe it to me and to all your fellow practitioners to bring it about that there will be a common saying current in America: As polite as a pedagogue.

*Practical School Administration:*

# Saving Money by Means of New Techniques

By PHILIP C. LOVEJOY, Formerly Assistant Superintendent of Schools, Hamtramck, Mich.

IN PREVIOUS articles I have stated that this particular series will not devote much space or time to the subject of capital costs. It will not be amiss, however, to suggest a word of caution. Whatever we secure through bond issues at the present time is going to add materially to future costs. No executive can afford to disregard this important phase of educational finance.

Recently a large metropolitan daily stated editorially that all great public improvements have been instigated by the public itself which had gone to the polls and voted for bond issues in varying amounts and with varying maturities. To-day this same public finds itself confronted with enormous charges for debt service, likewise a reduced income, and, hence, current demands that seem exorbitant. In some cases the costs for debt service are absorbing more than 30 per cent of the entire school budget. These charges must be paid first. The credit of the community depends upon such payment. In the meantime schools must be operated, and in many cities taxes are not being paid with rapidity. The dilemma is significant.

### *The Problem Faced by One District*

In the middle of the year one school district found itself $300,000 short of the income needed to pay its expenses for the remainder of that year. Hasty meetings of the board were called to determine where money could be saved. Since teachers' salaries demanded so much of the budget, the first thought was to reduce them, even in face of the contracts that had been issued. Surely the teachers would be patriotic enough not to object. But these teachers had received no increase the previous spring when the contracts had been issued. A reduction in the middle of the year would in reality be a double cut for that year.

The board of education then considered taking two weeks from the school year. This seemed quite popular among certain citizens, which indicates that the true value of the product of the schools was not being appreciated. Evidently a poor program of public school relations had been maintained in that community. No one even considers lopping off two weeks from the year of service of firemen or policemen in order to save money. Turning 8,000 or 10,000 youngsters into the city streets apparently is considered only from the standpoint of saving money in educational costs. Consideration is not given to the other tremendous values that must be conserved.

### *Penalty of Too Reckless Spending*

This community was in desperate financial circumstances. A newspaper editorial pertaining to this situation read as follows:

"The financial predicament in which Town X finds itself with its treasury depleted, its credit gone and extensive bond issues coming due, is an example of the situation many municipalities of the country are facing or find threatening them. Town X leads the procession, that is all. In all cases real trouble lies ahead. Cities and states, too, for that matter, have played; now they must pay if they can.

"For many years men like Calvin Coolidge and Secretary Mellon have repeatedly warned the country to put an end to the wild orgy of free spending by state and local governments that has been sweeping the land like a perpetual epidemic. But nobody anywhere has seemed to pay attention to the warnings and protests of anybody. Now the end of the joy ride has arrived and the most skillful sort of driving is going to be none too adequate to prevent the finale from producing a lot of wreckage.

"The recklessness with which bond issues have been authorized and sold over the land has created a burden that was beginning to stagger the taxpayer even when times were good. In many parts of the country municipal obligations are selling at fifty to fifty-five cents on the dollar. Doubtless in most instances these securities will come back, but they are going to do so only as the result of a long period of rigid public economy.

"It won't do any good to talk retrenchment or

economy. Planning for reform won't help. Reform must be instituted at once. Expenses must be cut and cut drastically. If a dollar is spent, value for it must be received. Luxuries and nonessentials must be cut out, and perhaps some of the things we have become accustomed to call necessities. Public peace and safety must be preserved, but in a businesslike, frugal way. Each municipality must pull in its horns and commence living a simple life.

"Economy is the biggest public need in each city to-day except police and health protection. Even education takes a second place."

Here we see the direct result of voting bond issues in excess of what a community may be able to pay for. In the particular town in question the board finally decided that it would be able to carry on for the balance of this year, but it has planned drastic cuts for next year. Incidentally, this is one of the towns mentioned in my article for last month wherein I cited the principle of concentration as applying to the employment of superintendents. It is now time to pay, and educational suffering is going to ensue. The price about to be paid to ensure financial economy is going to be tremendously high unless the most extreme care is used. Even now the high school swimming pool has been closed as a recreational center in order to save $250 in five months. Hundreds of young persons who were accustomed to visit the pool have now been denied this privilege and must seek recreation elsewhere. The price paid to save $250 may be far too great.

### *The Need for Careful Cutting*

There is no question but that economies will have to be effected. We are advocating that in this series, but we are also sounding a warning to the effect that we must be careful where and how we cut costs. We must keep rash emotionalism from entering into the proposed changes. On all sides suggestions are being made. Witness for instance, the utterances of William H. Murray, governor of Oklahoma, in his first message to the state legislature delivered on January 12, 1931.

"There should be some provision that would require the teacher to devote more than ten to eighteen hours a week. The constitution of the state provides that all services for the state shall be eight hours a day and that does not mean one or two hours for the teacher and twelve hours for the printer and the laboring man.

"My view of this system is this—If the member of the faculty devoted eight hours a day, including one hour for noon and forty minutes to an hour for recess, leaving six hours of actual work in the school, that would be reasonable, and it would eliminate 30 per cent of the professors and mean in the end 30 per cent saving to the taxpayers in the cost of education.

"I recommend that a law be passed providing that junior colleges shall admit no pupil until such pupil shall have mastered the eighth grade—that students can enter college only on examination.

### *Policies Must Be Justified*

"A law also should prevent any duplication of work in state institutions of higher learning. The most deplorable thing in all our educational errors is the placing as the shibboleth and slogan of institutions the subject of ball playing and other sports. The people could afford to pay for sports in the educational institutions to a limited extent, but when it comes to a university paying an aggregate sum of $52,000 a year for instructors in sports alone, it is entirely too much.

"I am aware that in all these things I meet with a cry that 'It does not meet the requirements of the North Central Association,' but why should Oklahoma permit the North Central Association to dictate the policy of its law on educational matters and the expenditure of her monies? Why should not the sovereignty of the state dictate these things? The time has arrived to wipe out the policies of the North Central Association and adopt an all inclusive Oklahoma policy in meeting the educational needs and costs. I shall endeavor to do this with the help of the legislature and the guidance of the best brains of the state."

Whatever may be our attitude toward the statements of this and other governors, school men must realize that the time has come for the justification of many things that have heretofore been accepted by a prosperous public. Speaking on the subject of industry and unemployment, with the related seasonal tasks, James Couzens, senator from Michigan, has stated that industry will have to solve this problem or else the government will step in and do it. Likewise in the field of education, unless educators themselves can see these problems and keep on the alert for a solution that will be backed by facts and at the same time achieve economy, the other agencies of government will step in and make drastic changes of their own accord.

### *Administrators Should Be on the Alert*

In the April issue of The NATION'S SCHOOLS, various economies that could be effected in the field of personnel were discussed. It will be remembered that two topics suggested that school administrators maintain a constant research in order to develop for ultimate adoption as a policy new techniques of instruction whereby the pupil-

teacher ratio can be increased from its present figure constantly upward—perhaps without classes as such—so that the present personnel may care for growth, with the eventual idea that a larger enrollment may be taught with a smaller corps. As a corollary, it was suggested that the more experienced and expert teachers should have salaries greater than those now paid, but that each of them should be provided with an educational intern employed at the lower end of the salary scale.

### *Fewer Teachers—Larger Classes?*

Recently I have had many discussions with school men on this topic, and they have practically all voiced the idea that large classes are detrimental to the pupils' progress and that it would be impossible to have classes much larger than those we now have. I still insist, however, that financial urgency is going to demand the discovery of new techniques that will permit larger classes to be conducted with even greater efficiency of product than is now achieved. When we talk a larger pupil-teacher ratio, we find it difficult to divorce in our minds the new procedure and techniques from the present type of class, molded pretty much on the recitation type. I believe that we are going to develop a system of education whereby we can have a heavy teacher load and achieve a superior product.

In Hamtramck, Mich., during the second semester of this year, Supt. M. R. Keyworth selected four of his most expert teachers and doubled their class load to seventy. He provided each teacher with a clerk to care for many of the minor details in conducting such a class. So far all tests have shown that efficiency has not been lowered, neither efficiency of teaching nor efficiency of product.

### *What the Future May Bring*

May we not be able to say that in the school of the future it shall be possible by means of new techniques to care for the educational needs of 1,000 pupils with but ten experienced teachers (experts) assisted by several educational interns. It may be that pupils will not be in classes as we now understand the word at all. Surely such a change is not more radical than those that have been made since the days of the one-room school. Techniques have changed strikingly in the past few decades. May they not change as dynamically in the next decades? The necessary techniques for this new type of school must be developed. Strides are being made in this direction. Is it not one of the chief obligations of present day school executives to assist in this development? Such times as 1931 serve to hasten this work, for now it is imperative that money be saved and that children be educated with a finesse not before demanded. It is possible that the necessity will serve as the impetus to the solution.

Specific instances of educational economies that have been effected by school superintendents are presented here.

William B. Jack, superintendent of schools, Portland, Me.: Consistent efforts to serve effectively our boys and girls show invariably a practical saving of the city's money. The per capita cost in the elementary schools has been reduced from $76.64 to $71.59.

Clarence Vliet, superintendent of schools, Birmingham, Mich.: Power contracts were changed from the open order type at five cents a kilowatt hour to the standard power rating thus permitting a demand charge of one and a half cents a kilowatt hour. A saving of $550 a year was saved in this way. Mechanical stokers were installed. These eliminated smoke and saved 20 per cent on the fuel bill, or approximately $1,000 a year. The boiler repair bills were also cut.

### *Effective Economy Measures*

L. A. Butler, superintendent of schools, Grand Rapids, Mich.: The elementary teachers handle their own music and art classes. A program of practical arts has been substituted for manual training and home economics in the elementary schools. This saves the salaries of one or two teachers to each building. The city has been redistricted and three elementary schools merged. An even distribution of teachers has been accomplished and the teacher personnel reduced by thirty-three, which has resulted in a saving of more than $50,000 a year.

Clyde Creaser, superintendent of schools, Ithaca, Mich.: The tax was reduced by two mills. An increase in nonresident pupils was absorbed by the regular classes, and a saving of $2,250 effected. The curriculum was reorganized to receive more state and Federal aid, a change that saved $900. A saving was also made in the buying of manual training supplies. The boys brought old lumber from home for experimental work, thus reducing lumber costs by half. The salaries of beginning teachers were also lowered.

C. R. Heemstra, superintendent of schools, Croswell, Mich.: The morning and afternoon kindergarten classes were combined into one afternoon session. The kindergarten teacher conducts the first-grade classes in the morning. This saves the salary of one teacher. A modified platoon system was adopted in the first, second and third grades so that the regular class teachers are always busy. A saving of 5 per cent in salary costs was thus made.

*Your Everyday Problems:**

# Removing the "Bargaining" Idea From Salary Discussions

By JOHN GUY FOWLKES, Professor of Education, University of Wisconsin

DURING the past few years so much publicity has been directed at salary schedules for teachers that usually it is assumed that any progressive school system has a more or less automatic teacher salary schedule. Such an assumption is much more nearly true in the larger communities than in the smaller ones. Also in many smaller communities where progressive young men as superintendents of schools have attempted to install scientific salary schedules the task has not been an easy one. In the first place, in many communities teachers themselves are accustomed to bargain for all they can get for next year. Also, it has been the custom in some places for teachers to "take a contract" only as a safety first policy and to break the contract if a better position comes along.

Two years ago a young friend of mine became superintendent of schools in a community in which conditions similar to those just listed had existed for many years. In his quiet, effective way, some progress was made in correcting matters in this direction last April. In light of existing economic circumstances, it seemed essential that a concerted effort be made to obtain a fuller understanding by the teaching staff with respect to teachers' salaries within the community. After some consideration, this superintendent decided to discuss the matter frankly. To lend dignity to the affair. he decided to send the discussion in the form of a bulletin rather than "preach" to the teachers. The results of his efforts have been gratifying.

### *What One Superintendent Did*

Inasmuch as the problem presented here unfortunately is somewhat common in certain quarters, the communication used by the superintendent under discussion is duplicated as follows:

"The question of teachers' salaries is at best a difficult one. Even in the largest schools, which have as nearly automatic salary schedules as is possible, there is dissatisfaction. Such a condition is likely to be more acute in the smaller systems where personal relationships among teachers are more intimate—thus magnifying likes and dislikes, and consciousness of abilities and weaknesses.

### *Facing the Facts*

"Satisfaction or dissatisfaction is quite likely to be relative, that is, in terms of what others get. It is humanly impossible for any board of education to set salaries for any group of twenty teachers who vary in experience, training and ability without some dissatisfaction. If all salaries were doubled, the better teachers might justly reason that if certain teachers' salaries were doubled, theirs should be tripled. A teacher frequently magnifies a difference of $50 between her offer and that to some other teacher to the extent that in importance it looms greater than the $1,200 or so, in which they may receive alike. I doubt if there is a teacher (or superintendent) in this state who would not like more money and who cannot think of some perfectly valid reasons why he should have it in terms of what others are getting.

"The members of a board of education do not occupy an enviable position. They receive criticism from the taxpayers on one hand for paying too much, and from teachers, on the other, for paying too little. They bear the responsibility of providing for the children of a community the best education they feel they can afford. They are not spending their own money. They are spending other people's money. By and large, I doubt if there are any public officials who honestly try harder to do the right thing than boards of education. These members of the board are human. Certainly they make mistakes, the same as superintendents, principals, teachers and everyone else. Probably boards overpay and underpay as judged by ability to pay, in individual cases in about the same proportion that we, as teachers, erroneously mark pupils too high or too low.

"We, as teachers in a small community, must

*Discussions in this department deal with problems that frequently confront principals and superintendents. Inquiries on problems of this nature should be addressed to Doctor Fowlkes.

face certain facts: (1) that the board of education must abide by certain maximum salaries—which maxima must necessarily be less than maxima in larger cities; (2) that advancement beyond the maximum is dependent largely upon moving to a larger city; (3) that teachers can probably never be paid what they are worth, since teaching worth cannot always be expressed in terms of dollars; (4) that the laws of supply and demand, in the long run, influence the price of teaching the same as any commodity.

*Board Policy Fair*

"The board has expressed a very fair, and, I believe, sound policy with regard to releasing teachers from contracts to enable them to accept professional advancements. The board appreciates the salary limitations of this community. It does not wish to interfere with the professional advancement of its teachers. It knows that many good positions come on 'breaks' and that they must be accepted at the time they appear, if at all. Consequently, the board is willing on reasonable notice to release from her contract any teacher who has an opportunity for decided professional advancement.

"Such fair treatment by the board of its teachers ethically involves similar consideration of the board by the teachers. Willingness to release does not mean that the board expects teachers to accept a contract merely to 'play safe,' and then to join agencies and broadcast applications in the frantic hope that the contract will not have to be fulfilled. Between this extreme on one hand and being absolutely 'off the market' on the other, as is required in many schools, is a reasonable attitude which neither jeopardizes the professional advancement of the teacher nor the educational well-being of the pupils. The board surely has a right to expect that teachers who accept do so honestly and whole-heartedly, and whereas they may be released on proper occasion, if such opportunity does not occur, that they will give, cheerfully and without stint, to their pupils to the best of their ability.

"The board also appreciates the unfairness of making offers to teachers, some of whom accept, assuming the offer is made in good faith as the best possible offer—and then to have other teachers ask for more money, and get it. Such practice tends to reduce salary making to the horse trader basis. Consequently, the board has endeavored to make the best offer it considers itself able to make and expects teachers to accept or reject on the basis of these offers. The road is not absolutely closed to further changes. Cases of very obvious unfairness will be considered. Such cases, however, must be extremely unusual to cause a change in the offer. It is as difficult to change one case in a list of offers as it is to change a pupil's mark. Usually one change involves a change of many more. When it has been customary for teachers on receiving their offers always to counter with requests for increases, one cannot censor teachers for so doing. They may easily reason that it costs nothing to try, they can't lose anything, and they may make $25 or $50 very easily. Also, there is the implied idea that perhaps the board has made the offer low, expecting to have to increase it.

"The offers made this year are, however, for all practical purposes, final. They would be positively final except for the realization that perhaps once in a thousand cases a grave injustice might be done, and it is to avoid this case that there is any possibility of change whatsoever.

"As is quite generally the case, the offers this year, within the tentative minimum and maximum, were arrived at on a basis of experience, training and success. The first two are objective, but it is difficult to determine the third objectively. As a result (as is typical with most salary schedules) the success factor, beyond a desirable minimum required for retention on the staff, is largely ignored. That is, if it were agreed that no teacher below a 'fair' rating were to be retained, those regarded as fair, good or excellent would all be treated substantially alike. The reason for this is that boards get into no end of difficulty trying to make $25 or $50 differentiations between good and fair teachers. Hence, it should be evident that if a beginning teacher, near the minimum, receives an increase of $100, it does not mean that she is regarded as a better teacher than a teacher at the maximum who receives no increase. In fact, usually the case is reversed—the teacher at the maximum is the better teacher.

"I hope these random remarks about salaries will at least partially answer some questions that always arise when the salary question is considered. In case there are other questions, do not hesitate to come to the office to talk them over."

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## Oregon Provides Free Textbooks for Its Elementary Pupils

Free textbooks for pupils in the public elementary schools are to be provided in Oregon as the result of the signing by Gov. Julius L. Meier of a bill passed by the legislature.

The new law provides that not more than $1.50 a year shall be expended for each child. The cost of books is to be paid by the district affected.

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*Schoolhouse Planning:*

# Space Efficiency: A Major Factor in Appraising the School Plant

By ARTHUR B. MOEHLMAN, Professor of School Administration and Supervision, School of Education, University of Michigan

THE third major factor in the appraisal of the existing school plant is space efficiency. This requires the careful analysis of each plant with respect to the various types of space and the relative proportion of different spaces to each other.

A school plant with excess space in classrooms or in corridors is not efficient since this waste space must be heated, ventilated, cleaned and repaired. From a strictly educational viewpoint a building with much excess or nonusable space may be efficiently administered so far as the instructional program is concerned, but it does represent an operating and upkeep waste.

A question that is naturally raised in this connection is whether or not a space efficiency appraisal of the existing plant is worth the time and money necessary. If plants have much waste space, is it better practice to continue their use or to consign them immediately to the scrap heap? The general answer must be that such an appraisal is well worth while. Whether the immediate result is the scrapping or retention of a specific unit is not the important point. This space appraisal, by itself, should definitely not be the determining criterion of retention or rejection. Combined with ratings in other phases, it does have a definite participation value in the final appraisal and its importance is too great to be overlooked.

### *"Candle of Efficiency"*

Finally, one of the most beneficial indirect outcomes is that no executive can make a careful space efficiency survey of the existing plant without being educated to the value of more careful attention to future educational designing. If the activity had no more worth than the prevention of similar mistakes in projected plants, it would more than compensate for all of the time and money spent in making it.

There are several methods of gross space efficiency appraisal. The most commonly known is the so-called "Candle of Efficiency" prepared in 1925 by a committee of the National Education Association. By this method a building is divided into the following six parts and their optimum relationship to the whole determined: (1) instruction, not less than 50 per cent; (2) administration, not more than 16 per cent; (3) stairs and corridors, not more than 20 per cent; (4) vertical flues, not more than 3 per cent; (5) accessories, not more than 1 per cent; (6) walls and partitions, not more than 10 per cent.

### *Usable Floor Area*

Insofar as this scale calls attention to the several elements in designing a physical plant and suggests the relationships of facilities, it is good. Its limitations are obvious to the school plant specialist, and the great weakness is that the average executive applying this measurement tends to consider the findings as final rather than suggestive. Changes in organization and in curricular activity would not be reflected in this scale unless some of the subclassifications of facilities were modified to meet the requirements of progressive schools. Its measurements represented *status quo* or current practice at the time the scale was developed.

A second method of determining space efficiency is to consider only the floor space and divide this into usable and nonusable areas. Usable area is considered as that portion of the total area that is used for the specific purposes of instruction, administration, operation, traffic, voids and partitions. In addition to discovering the proportional relationships, it is also possible by this method to translate floor space into per child requirements and to prepare an appraisal scale in terms of the relation of the complementary to the actual instructional areas.

The use of a single factor, such as floor space, irrespective of the envelope and plan variables does result in omissions from space efficiency appraisal that should be definitely contributing ele-

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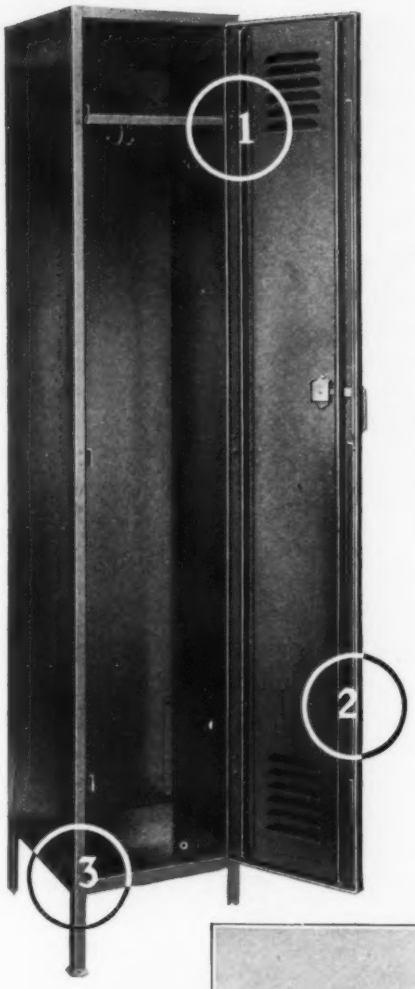


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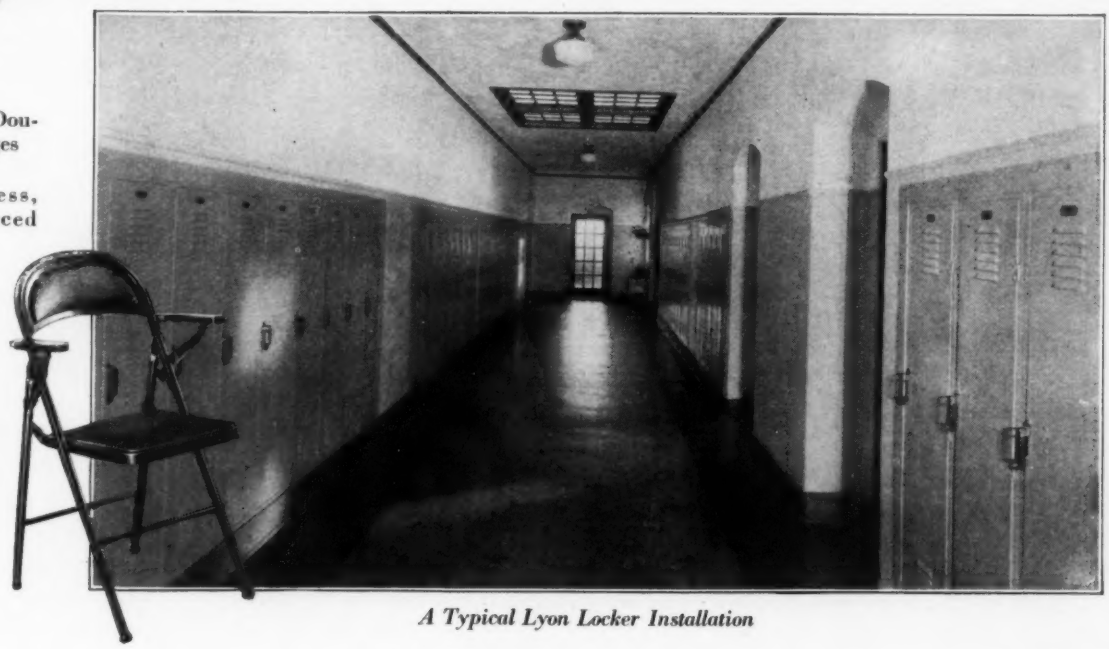

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ments in a total appraisal. A building is much more than floor space. From the standpoint of time involved and ease in calculation, this is the simplest and quickest of the three methods of determining space efficiency.

A third method of measurement, radically different from the first two, may be called the instruction-envelope-efficiency ratio. This method is based upon the fact that two major elements are involved in the determination of space efficiency. The first of these is the relative proportion of the instruction space to the total space and the second is the efficiency of the physical plan in terms of its own elements.

Instruction-space-efficiency is the relation between the total area of a building and that portion available for instructional purposes. So far the factor to be determined is closely related to the second method already discussed. While the designing of a building to give the maximum usable instructional space in relation to the total space may not result in instruction-space-efficiency *per se*, it is an important factor affecting all other conditions. In other words, the allocation of a gross space of 50 or 60 per cent of the total does not mean necessarily that all the rooms are of the proper size or that they are properly lighted, ventilated, located or in curricular balance. An efficient and economic basic design may be inefficient in the execution of details. Instruction-space-efficiency is determined by dividing the area devoted to instruction purposes by the total floor area. The result is a gross measure of the relation of instruction to complementary space.

### *Determining Physical-Envelope-Efficiency*

Physical-envelope-efficiency is determined by ascertaining the number of cubic feet of building obtained for every square foot of shell area. This is found by dividing volume by shell area. This is a better index than the cost of a single cubic foot of building or the cost of a square foot of floor space. There is a definite relationship between the shell area and the volume of a building, and the physical-envelope-efficiency ratio considers both of these elements.

The final index, or instruction-envelope-efficiency, is the product of the ratios of instruction-space-efficiency and physical-envelope-efficiency.[1] Both factors are considered of equal weight. Questions may be raised with respect to the validity of equal consideration. Arguments might be advanced that instruction-space-efficiency is worth more than mere equality in relation to physical-envelope-efficiency. Possibly this may be true. At the present time, however, it is impossible to state objectively what the actual weighting of the instructional factor should be in relation to the physical factor. Weighting the instructional factor by two, in conformance with extreme opinion, would seriously undervalue physical plan efficiency. It may also be argued, with real validity, that these two factors in terms of scientific educational planning, are quite evenly balanced. The satisfying of instructional needs should be done as efficiently as possible in terms of the total building. The giving of equal weight to both factors may be considered a reasonable and conservative assumption.

Provided that the limitations of each method are kept in mind, it is possible to use any one of these three methods for gross space efficiency appraisal. The detailed appraisal of instructional efficiency must be made in terms of curricular fit. Every school plant should be judged upon the basis of the educational policies under which it is expected to operate.

### *The Open and Closed Plans Compared*

In terms of instruction-envelope-efficiency, it is possible to make certain generalizations with respect to plan types. Closed plans, particularly the square and rectangular, on account of the relation of shape to volume, rate high in physical-envelope-efficiency. By skillful educational designing, they may also rate high in instructional-space-efficiency. The closed plan, however, is lacking in expansibility, in outside lighting for all rooms and in orientation. Despite a possible high instruction-envelope-efficiency, which measures only physical factors, they must be judged negatively in terms of expansibility, lighting and orientation.

Open plans are of two types. The first group, including the "I," "U," "L" and "T" types, are quite efficient with small, moderately and fairly large sizes (up to 1,800 capacity). The "E" and "H" types are most effective when used with larger buildings. The "U" and "E" plans possess certain inherent orientation problems that are difficult to overcome, unless the site lends itself to building placement at an angle to the cardinal compass points. The "I," "T" and "L" plans are most desirable for elementary schools.

In appraising building height, it is well to bear constantly in mind the fact that flexibility, expansibility, freedom from hazards, and use efficiency decrease as the building rises above two stories. Since efficiency in flexibility depends upon the adaptability to changing curricular needs, it is evident that the higher the building the less flexibility it possesses. A low building offers the best opportunity for expansion because small as well as large additions to the original structure may be

[1] Frostic, Fred W., Moehlman, Arthur B., and Spain, Charles L., The Public School Elementary Plant, chap. 3.

★

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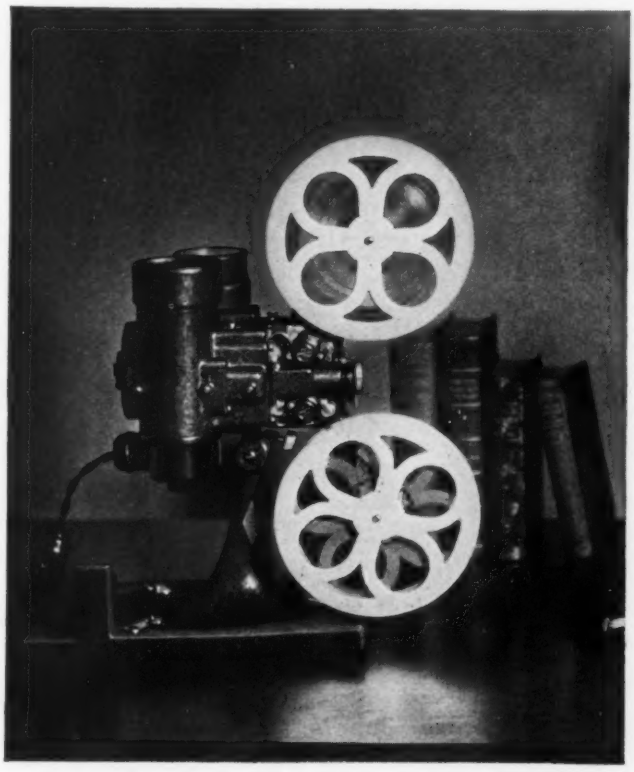

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Hazards increase rapidly with height because of the distance from the street level and the chances for congestion and panic on the stairs. The two-story building offers high safety efficiency because the second floor is only thirteen and one-half feet above the first floor, and stairs may easily be built to prevent congestion. Use efficiency tends to decrease with height because of limitations in flexibility and increase in hazards. It is probably somewhat cheaper, other factors being equal, to build three-story rather than two-story buildings.

Practically every community has a physical plant that has developed by the gradual process of accretion. In any given situation there will be fairly old, moderately aged and new buildings. Space efficiency appraisal in old buildings is generally low for several reasons. The older buildings were planned for larger classes than is now the practice. Consequently there is much waste space in these classrooms. Ceiling heights were also much greater than is considered economical practice. Ceiling heights of fourteen, fifteen and sixteen feet represent volumes that have no practical use but that must be constantly heated along with the balance of the building.

*Space in Older Buildings Often Excessive*

Large central, and sometimes open corridors in both elementary and secondary buildings are much wider than traffic needs require. Some surveys have shown elementary corridors ranging from ten to thirty-three feet in width. Since a twelve-foot corridor will care for elementary traffic in buildings up to 1,800 capacity, these excess widths represent considerable waste in operating, heating and upkeep. Because of their small capacity many of these older buildings have operating and traffic areas out of all proportion to the total instruction area.

This excess space may represent a considerable amount. In a recent study of twenty-two elementary buildings in a single district, the total floor area in classrooms amounted to 213,454 square feet. The excess area in classrooms alone was 30,634, or slightly more than 14 per cent. In some of these buildings the corridors were twenty-four and thirty-two feet wide, representing further space for which there was no use. Operating areas were proportionately large. When all these factors were tabulated it was apparent that a considerable sum of money was required annually to clean, heat and repair these spaces.

For a given set of new buildings designed with a minimum of waste, it probably would have been possible to reduce operating costs approximately 20 per cent and the annual upkeep by many thousands of dollars. Despite this possibility, however, the presence of many other factors weighed against the immediate elimination of all of these plants. The vital point is that in appraising the existing plant many factors must be considered and each element has only a relative importance in determining the ultimate outcome.

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## Cleveland's Curriculum Centers and What They Are Doing

Finding the opportunity for experimentation is difficult in a public school system, particularly in a large city. Yet fairness to pupils and to patrons demands that the newer theories of education be tried out. Obviously the elementary schools cannot borrow from the experience of private schools where pupils, plant and environment are radically different. At the same time they cannot ignore the development of novel classroom methods or of a new philosophy of education.

Cleveland has met this problem by establishing nine curriculum centers to facilitate such experimentation. Specific accounts of the work in each curriculum center and a discussion of the philosophy behind their establishment are found in the 1929-30 report of R. G. Jones, superintendent.

Cleveland curriculum centers specialize on specific branches of the curriculum. Arithmetic is considered in one school, elementary science in another, and so through all curricular subjects.

The nine centers are located in all parts of the city, certain buildings being devoted to the consideration of one subject. Care was taken in choosing buildings for the experimental schools. Old buildings were preferred so that it could not be argued that the work was being developed under ideal conditions.

Results of curriculum center experimentation are passed on to other buildings in the city as soon as they have been checked scientifically. Wednesday is visiting day in the centers where teachers from other buildings observe teaching methods in the experimental schools.

Curriculum center teachers frequently go to other buildings to demonstrate methods and to establish new work. Two free teachers are employed in all centers in order that classroom teachers may do this demonstration work.

Units of work developed in the centers are distributed in other buildings. Ten elementary schools, for example, are now applying unit sheets developed in the arithmetic curriculum center, to regular classroom situations.

*Souci School, Greenville, South Carolina*

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*Clark University, Worcester, Mass.:* Both academic and pedagogic courses are offered. The academic courses cover various fields of regional, economic and human geography, and history courses are given in both American and European history.

*Teachers College, Columbia University, New York City:* The summer session is an integral part of the academic year. All of the regular staff takes an active part in the work of instruction, most of them every year, some in alternate years. The courses that are most in demand are given every year; all other important courses are given in alternate years, or within a four-year cycle. Courses in the summer session may be credited for matriculated students towards degrees.

The offering for the summer session of 1931 lists hundreds of courses, especially designed for teachers, supervisors and administrative officers. In addition to a wide range of courses in the more well known fields, such as higher education, educational administration, normal school education and secondary education, there will be an ample representation of other fields, such as psychiatric education, parent-teacher associations, curriculum, child development and educational statistics.

Special conferences will be held at Teachers College in educational administration, rural education, adult education and parent-teacher associations. These conferences will be open to all students of the summer session.

Classes will be in session from July 6 to August 14 inclusive.

*George Peabody College for Teachers, Nashville, Tenn.:* During the summer there will be special courses for superintendents in city and county. One especial feature of the work in the department of administration this summer will be courses in administration, in supervision in a dual system of education, that is, in systems providing separate schools for two races.

There will be courses in teachers' college administration and courses in the administration of higher education including separate courses in the administration of junior colleges and of colleges and universities. The third annual institute for those interested in the administration of higher education will be held during the summer. Courses for registrars will be included in the program as well as courses for high school administrators and for those who administer the country schools.

Special attention will be paid to the work of the supervisor in all the divisions of education mentioned with an especial effort to adapt the work to make it of benefit to those working out from state departments of education.

*The George Washington University, Washington, D. C.:* The George Washington University will stress courses in history, economics, and government, it being the intention to emphasize the work in the school of government.

Scholars from other universities in America and Europe and specialists from the executive departments of the government and from other institutions in Washington have been added to the regular staff. Among these are: Frederick Austin Ogg, professor of political science and chairman of the graduate division of the social studies of the University of Wisconsin; William Frederick Notz, dean of the school of foreign service, Georgetown University; Ernst Esch of the University of Cologne; Stanley K. Hornbeck, United States Department of State, and Leo S. Rowe, Pan-American Union.

In the school of education the regular staff has been supplemented by a number of eminent educators. Eighteen courses in the field of education are scheduled.

*Iowa State College, Ames:* The vocational education department will offer a number of subjects adapted to the needs of superintendents and principals of rural grade and high schools, whether of the consolidated or the independent village type. These subjects are included in a course leading to

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the degree, master of science. The entrance qualification is an undergraduate major in education. While the major is made up largely of rural education subjects, it is denominated vocational education; and the minor may be taken in any vocational or science field.

*Iowa State Teachers College, Cedar Falls:* Courses of special interest to superintendents and principals include elementary school supervision, school administration, mental tests, educational tests, the elementary school curriculum, school laws of Iowa, the junior high school, problems of vocational education, problems of superintendents and principals, and a course for high school principals and supervisors.

In the special fields, courses are offered in manual arts, art, home economics, instrumental and vocal music, agriculture, commercial education, play production, physical education for women and the coaching of athletics.

*The Johns Hopkins University, Baltimore:* In addition to the regular collegiate and graduate courses the Johns Hopkins summer school will offer the following courses of special interest to teachers, students of education and administrative officers in public schools: chemical education; supervision in secondary schools; philosophy of education; school administration; applications of psychology to education; unification of the kindergarten-primary curriculum.

Special courses are to be offered for teachers of handicapped children, with special emphasis on the hard-of-hearing. In cooperation with the American Association for Promoting the Teaching of Speech to the Deaf a full program of courses will be offered for teachers of the deaf. Courses in library science will be given in cooperation with the Enoch Pratt Free Library of Baltimore, including a course in school library methods.

The dates of the summer session are June 22 to July 31.

*University of Maine, Orono:* The University of Maine will offer twenty courses in education which will include the elementary school curriculum, statistical methods in education, junior high school methods, education of atypical children, the administration of extra-curricular activities, high school tests and measurements, mental tests, vocational education and vocational guidance.

Among the visiting professors will be: Helen C. Goodspeed, assistant to the director of home economics, Philadelphia; C. W. Holmes, principal, Langley Junior High School, Washington, D. C.; Martha L. Hatcher, state normal school, Paterson, N. J.; Sue Procter, supervisor of elementary grades, Ft. Thomas, Ky.; Dr. D. D. Brane, assistant professor of history, Western Reserve University; Mary I. O'Sullivan, professor of English, Rosemont College.

Many courses may be counted toward a master's degree, for which the minimum residence requirement is four sessions.

The session will begin July 6 and end August 14.

*University of Michigan, Ann Arbor:* Special attention is given to courses for teachers, supervisors and administrators.

Statistics in regard to previous summer sessions show that the percentage of graduate students in attendance at Michigan has changed in ten years from 21 per cent to 57 per cent. The school of education has recognized this trend and is offering a rich program for those who are working toward a higher degree in the field of education.

Definite plans have been made to conduct a four-day conference during the summer session to which all graduates of the school of education of the University of Michigan will be invited. At this conference leaders in the various fields of education will present for consideration the most progressive practices in the fields they represent. By this means superintendents, principals and teachers may obtain in a few days the most recent ideas on administration, supervision and teaching.

*University of Montana, Missoula:* College and professional courses will be offered in many departments and schools. Courses in education are stressed and the new school of education offers a wide selection of courses for superintendents, principals and teachers. A competent resident and visiting faculty will handle the courses of instruction in various fields. The board of recommendations endeavors to assist teachers, principals and superintendents to find positions they are fitted to fill successfully. This service is free to summer session students.

No special fees for nonresidents are charged. Railroads make special summer round trip rates.

*University of New Hampshire, Durham:* The courses of the summer school are designed to meet the needs of teachers, superintendents, administrators and supervisors of secondary and elementary schools. Graduate students may earn the degree of master of arts, master of education or master of science through work done exclusively in the summer session.

Short unit courses will bring to the 1931 session such outstanding educators as William John Cooper, commissioner of education, Washington;

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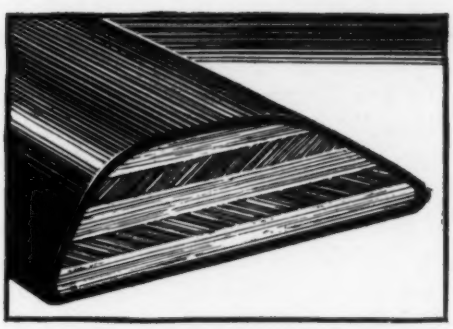

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Dean Henry W. Holmes, graduate school of education, Harvard University; James N. Pringle, commissioner, New Hampshire State Board of Education, and Dr. Guy M. Whipple, the noted psychologist.

The summer session will open June 29 and close August 7. The session of the Marine Laboratory at the Isles of Shoals will open June 22 and close August 14.

*New York State College for Teachers, Albany:* The summer session will open June 29 with strong offerings scheduled for superintendents, principals and others concerned with administrative work.

"Problems of the Secondary School Principal," "School Finance and Public Relations," "Supervision," "Achievement Testing," "Educational and Vocational Guidance," "Educational Research Problems," and "Educational Statistics" are some of the courses that will be especially interesting to administrators. Of interest also will be "Occupational Information." "School Publications" and "Educational Statistics."

Beginning this summer, all summer school work at the state college will be organized on an equivalent basis with the work in the regular session. Courses in the summer school will parallel those of the winter, not only in content but also in the credit hours they carry. Two-hour, and three-hour courses of the winter session will give equivalent credit during the summer. Only those courses required for the New York State teaching certificates have been organized on this basis heretofore.

Since the summer session exists primarily for direct service for those in immediate touch with secondary school administration and instruction, plans for the summer session call for the enrichment of the offering through activities of a supplementary nature, such as trips, excursions, group and departmental meetings and addresses.

*New York University, New York City:* The summer school will open July 6 and continue until August 14. With the exception of the graduate program in physical education, the courses of the summer school are conducted at the university center on Washington Square. Here a well-rounded program in professional, collegiate and commercial subjects is available for teachers and administrators under the supervision and guidance of the faculty of the school of education of New York University. The department of physical education conducts a program for graduate students in that field at the departmental camp on Lake Sebago, in Palisades Interstate Park, New York.

All the courses of the summer school may be used for credit toward baccalaureate or graduate degrees.

*Northwestern University, Evanston, Ill.:* The school of education, Northwestern University, will offer a wide range of courses during its summer session from June 21 to August 15. The offerings are designed especially for experienced administrators, supervisors and teachers. All courses are organized into programs, each of which is designed to prepare for a particular line of work and leads to an undergraduate or graduate degree.

The session offers advantages particularly to administrators and teachers in service who can avail themselves only of summer sessions for further professional study. Programs are planned in such way that students may pursue work during successive summer sessions, and at the completion of a particular program will have met the requirements for a degree. Requirements for bachelors' and masters' degrees may be met during summer sessions, and at least one year of credit may be earned toward the doctor's degree.

*North Dakota Agricultural College, Fargo:* In the summer school, June 16 to July 25, courses for persons engaged in educational work will be offered. The usual basic courses in education will be well represented, such as educational psychology, mental tests, educational sociology, public school administration and educational research.

In addition to fundamental educational courses, certain unit courses so called are available in educational subject matter. The unit courses are courses of a few days, a week or longer, and comprise an important element in the summer school program. Among these unit courses are: vocational guidance, extra-curricular activities, mental hygiene, the work of deans of girls in high schools, safety education, parent teacher associations, character education and the care and operation of school buildings.

Dr. Paul C. Whitely, Franklin and Marshall College, Lancaster, Pa., will reinforce the staff in educational psychology for the summer.

*Ohio State University, Columbus:* Ohio State University will this year present the most extensive summer quarter offering in its history. The quarter will be held from June 15 to August 29, the work being divided into the following terms: first term June 15 to July 23, second term July 24 to August 29. A total of 639 courses, to be offered by a faculty that will include some seventy visiting instructors, is scheduled by the two-score departments of instruction participating in the summer session.

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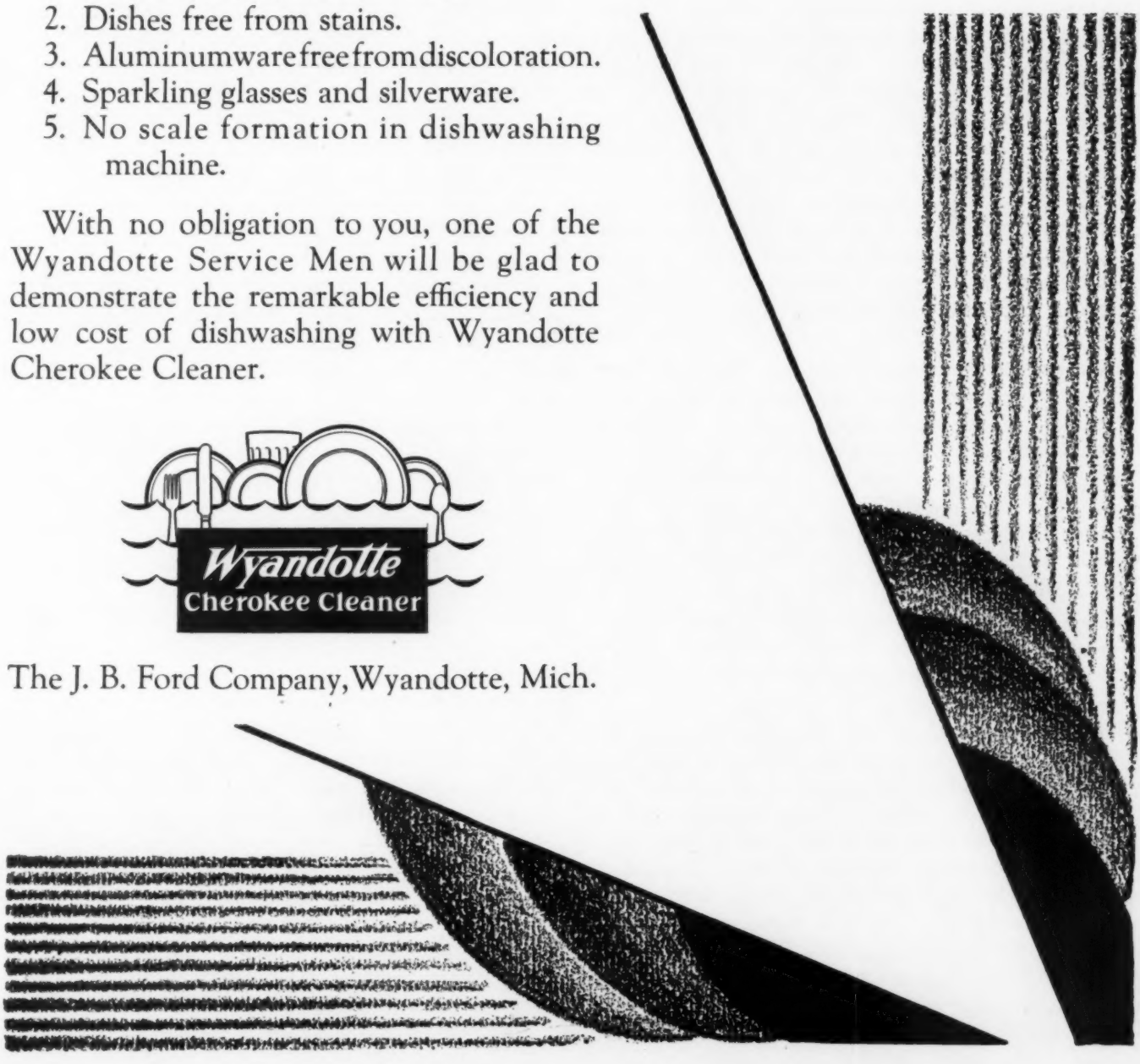

The special emphasis in all of the colleges during the summer will be placed on graduate work. The college of education will offer approximately 300 courses for undergraduate and graduate students.

Among others the college of education faculty will this summer present the following distinguished American and foreign scholars: William Boyd, lecturer in education, University of Glasgow; Joseph K. Hart, Vanderbilt University; Charles Spearman, University College, University of London; Margaret W. Curti, Smith College; Frank P. Graves, commissioner of education, New York. Prof. Charles S. Berry, formerly of the University of Michigan, and Prof. A. J. Klein formerly of the United States Office of Education, both now regular members of the college of education faculty, will offer courses.

*University of Oklahoma, Norman:* Several new features have been announced for the summer session and for the August intersession. These include: a course for junior and senior high school principals and another for school administrators, instructors including Dr. Herbert Bruner and Dr. Elbert K. Fretwell, Teachers College, Columbia University, New York City and Dr. Calvin O. Davis, University of Michigan, Ann Arbor.

Dates are June 10 to August 7 for the summer session, followed immediately in August with the intersession, lasting until September 4, work to be done in graduate courses only.

*University of Oregon, Eugene:* The three lines along which the summer school will specialize are: a clinical school for children who have particular difficulties in spelling, arithmetic, reading and writing, under the supervision and direction of Dr. B. W. DeBusk; a series of courses for high school teachers who are interested in personnel work; courses for school administrators in school administration in the small city, school supervision, curriculum making, statistics, child accounting and records, administrative problems in the high school, comparative school systems.

*University of Pennsylvania, Philadelphia:* The summer school session at the University of Pennsylvania begins its courses on July 6 and closes on August 15.

The facilities offered for the study of education are exceptional, especially for advanced and graduate students. The Penniman Memorial Library is an almost unique collection of ancient and modern works on all phases of education. Many of the books and pamphlets are out of print and very rare, and the graduate student doing research in the history or philosophy of education will find it an excellent place to work.

In addition to the regular staff of the school of education there will be a number of visiting professors including Robert D. Cole, University of North Dakota; Frank K. Foster, University of Washington; Henry Cremer, State Teachers College, Indiana, Pa.; Helen A. Field, formerly professor of education, University of Alabama; and Ruth Mary Weeks, Paseo High School, Kansas City, former president, National Council of Teachers of English.

*Purdue University, Lafayette, Ind.:* In the department of education graduate work is offered in school budgets and accounting, statistical methods, high school supervision, secondary school administration, public school administration, school grounds, houses and equipment, advanced agricultural education, the psychology of personality, educational sociology, occupational and trade analysis, and research in education.

The third annual school of rural leadership in connection with the summer session will begin July 13 and close July 25. The staff of the school is composed of men and women who are recognized as national authorities in their special fields.

The regular summer session begins June 11 and closes August 8.

*University of Tennessee, Knoxville:* The courses in general education will cover the fields of rural education, parental education, educational psychology, high school methods, tests and measurements, mental hygiene, junior and senior high school administration, elementary school administration, school law, curriculum study, city school administration, school finance, school surveys, supervision and current educational problems.

Elementary teachers, supervisors, principals and superintendents will find courses meeting their needs.

*University of Virginia, Charlottesville:* The summer quarter of the University of Virginia was organized and has been conducted throughout its history with the main purpose of meeting the needs of the teachers, principals, superintendents and supervisors who can do no college work during the winter session. Sufficient work in secondary education, school administration and supervision is offered for obtaining undergraduate and graduate degrees by summer work alone as well as for all the state teachers' certificates.

The summer quarter is rapidly gaining a reputation for its program of graduate work. Although graduate work is offered in a great many subjects

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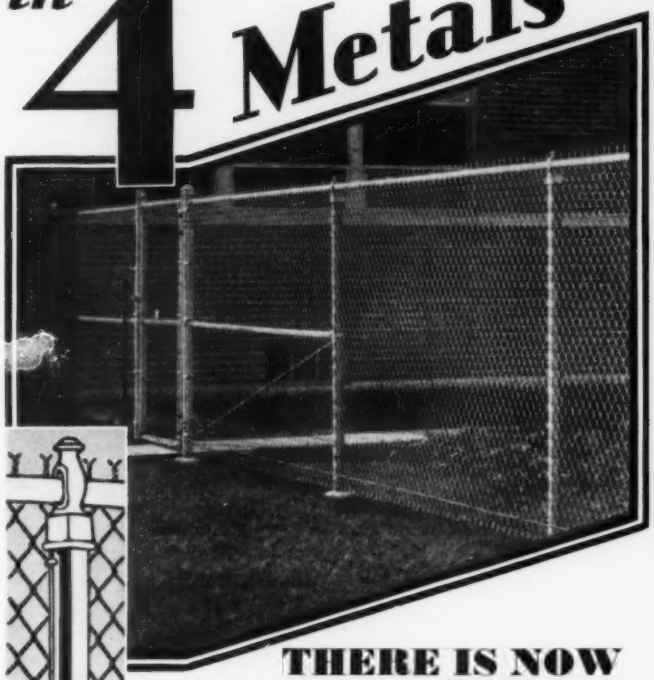

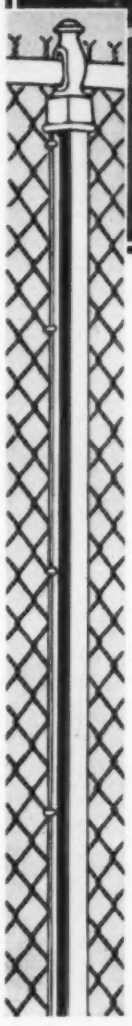

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*Washington University, St. Louis:* With a university library of 375,000 volumes and easy access to the St. Louis Public and the Mercantile libraries with 900,000 volumes, the Museum of Fine Arts, the Missouri Historical Museum and Shaw's Garden, Washington University offers excellent opportunity for summer study.

Undergraduate work is offered in various departments. Graduate work leading to advanced degrees is afforded in many fields. Numerous courses in history and principles of education, elementary education, secondary education, school administration, educational tests and measurements and supervision, leading to the two new advanced degrees, master of arts in education and doctor of education, are offered by members of the regular faculty and visiting instructors.

*University of Washington, Seattle:* Courses will be offered in each of the nine divisions of education: educational psychology, educational sociology, educational administration and supervision, classroom technique, history and philosophy of education, education and comparative education, educational measurement and scientific technique and curriculum making.

School administrators will find many courses designed especially for them. These courses in administration and supervision are offered by instructors whose reputation is nationwide. The attention of administrators and supervisors is called particularly to such courses as school hygiene, administration and supervision of vocational education, the elementary school library, curriculum making, and other courses that deal with specialized aspects of the administrator's regular work.

College teachers of education or other subjects will find many courses that are particularly adapted to their needs.

The number of graduate courses has been increased and the range of subjects that they cover has been extended.

*The State College of Washington, Pullman:* The State College of Washington is offering a wide range of courses in education for superintendents and principals, including courses to be offered by Dr. L. Thomas Hopkins, Teachers College, Columbia University, and Dr. Lester H. Dix, Lincoln School, Teachers College, Columbia University, on curriculum construction, a course by Doctor Dix on the organization and administration of the elementary school, and courses by Supt. O. C. Pratt, Spokane, and members of the regular education staff of the college. Industrial arts work, physical education and coaching, home economics, speech and music will receive special emphasis. Undergraduate and graduate courses are offered in practically all departments of the institution.

*West Virginia University, Morgantown:* During the first term (June 12 to July 24) of the summer session, the college of education will conduct its demonstration and training high school according to the Dalton Plan. The demonstration and practice teaching will be supplemented by a series of lectures and discussions to be conducted by R. B. Marston, superintendent of schools, Sistersville, W. Va., who instituted the Dalton Plan in his school system three years ago and who is this year conducting a carefully controlled experiment with the Dalton and the conventional plans.

Prof. L. B. Hill will offer a graduate course in practice supervision comparable to the undergraduate courses in practice teaching.

*College of William and Mary, Williamsburg:* Those who attend the summer session of this historic college are afforded an opportunity to study in an atmosphere of Colonial history. Williamsburg itself, the Colonial capital of Virginia, is in the process of being restored to its appearance of early Colonial days, while nearby are the historic shrines of Jamestown and Yorktown.

The school of education offers courses for elementary and secondary school teachers, principals and supervisors and public school superintendents. These courses lead to the degree of bachelor of arts, bachelor of science and master of arts.

A special feature of the program this summer is an opportunity to observe and participate in the special summer activity program of the Matthew Whaley School. This institution, a beautiful $400,000 Colonial building belongs jointly to the city of Williamsburg and the College of William and Mary. The activity school is planned for all sec-

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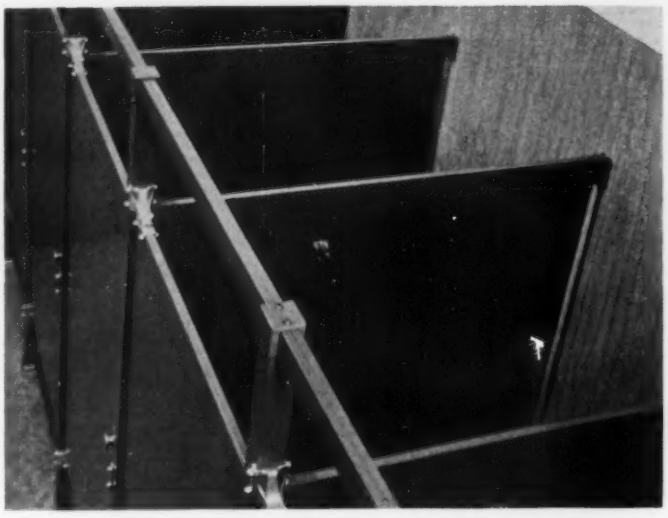

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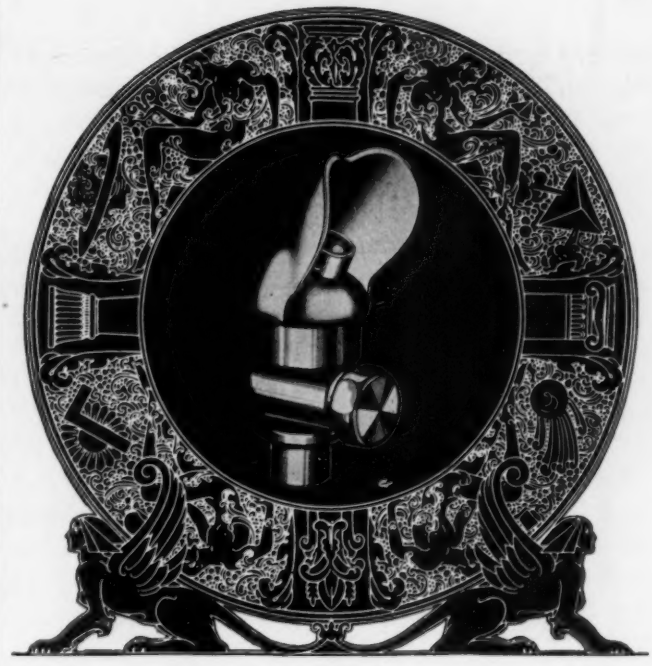

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ondary and elementary children who desire to attend, and offers them no regular graduation credit. Much of the program is to be offered out of doors and consists of large units of work, dramatization and playground activities.

*University of Wisconsin, Madison:* The school of education includes in its organization the following departments and courses: education, industrial arts education, art education, educational methods and the four-year courses in physical education for men and women.

During the summer session the department of education will have a staff of thirty-five faculty members in residence, of whom seventeen are visiting lecturers. In the six-week session the department will offer approximately fifty courses in the following fields: organization and administration, supervision, the curriculum, instructional procedures, measurements and statistics, vocational guidance and vocational education, educational psychology and the philosophy and history of education.

In the departments of industrial arts and art education fourteen courses are announced. There will be two visiting lecturers in these departments in addition to six members of the resident faculty.

The department of physical education for women will have a total staff of ten members, of which three are visiting lecturers. Fourteen courses have been scheduled. The department of physical education and athletic coaching for men will offer eight courses with a staff of eight resident members and one visiting lecturer. These are open to both men and women.

In the nine-week session of the graduate school, one-half semester of residence credit toward a higher degree may be earned. For this session the department of education has announced three courses in school administration, two in educational and vocational guidance, two in measurements and statistics, and one each in the curriculum, philosophy of education, and history of education.

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## Beauty Courses Now Taught as a Trade in Washington

The public schools of the state of Washington may conduct beauty courses and receive Federal aid under the provisions of the Smith-Hughes Law, according to a recent opinion by the assistant attorney general of the state. This opinion reverses a previous decision which held that the introduction of such a course was illegal.

The Edison Vocational School, Seattle, since December 1 has been conducting a course in beauty training as a trade. Classes are in session eight hours a day, six days a week.

The following letter from the assistant attorney general's office to Robert M. Burgunder, prosecuting attorney, Seattle, Wash., explains the reason for the reversal of the decision:

"Dear Sir:

"We have your letter of recent date referring to our opinion of October 8, 1930, relative to the authority to conduct beauty culture classes in the common schools, and in compliance therewith, and also with our promise to you and the officers of the Seattle schools, made at our recent conference relating to this opinion, we have carefully reconsidered the same. We there held that beauty culture schools could not be conducted in the common schools for the reason that the practice of beauty culture was not, in our opinion, a trade, within the meaning of that term as used in our vocational education act, sections 4,906 to 4,925, inclusive, Rem. Comp. Stat.

### *Federal Act Provides for Courses*

"Since the date of that opinion, we have been advised that the Federal Board for Vocational Education, having supervision of the Federal Vocational Education Act, commonly known as the Smith-Hughes Law, has recognized the practice of beauty culture as a trade and allows Federal aid under the provisions of the Smith-Hughes Law for the teaching of this subject in the common schools. Also, since the date of our opinion, we have been informed that ten states, namely, California, Georgia, Colorado, Idaho, Louisiana, Maryland, Massachusetts, New Jersey, New York and Texas, are at the present time conducting beauty culture classes under the provisions of this act.

"We concede that our previous opinion is not absolutely free from some doubt or criticism, and owing to the fact that our vocational education act was enacted after the Federal act, and for the express purpose of accepting the benefits offered by the Federal act, and owing to the further fact that the Federal Board for Vocational Education has seen fit to recognize the teaching of beauty culture or cosmotology as within the act, we see no reason why the state of Washington should be deprived of Federal aid by a decision from this office. We, therefore, overrule our previous opinion and hold that beauty culture can be conducted in the common schools of this state.

"It is necessary, however, that the provisions of the state law relating to the teaching of beauty culture be complied with, and that all of the fees provided for in the beauty culture act be paid."

# VOCABULARY *by* Induction

## A By-product of Visual Experience

*Pupils taught with the aid of Eastman Classroom Films learn the true meaning of words, and are both able and eager to express themselves.*

*Eastman Classroom Films bring the world's experience to the pupil in unforgettable motion pictures.*

*Pupils who grope for words need this visual experience as an aid in acquiring an accurate and meaningful vocabulary.*

WHAT IS VOCABULARY? A pupil recognizes a certain number of words. But how well does he *know* them? On the answer to this question may depend the success or failure of his education.

Too often word conceptions are hazy. The *visual* experience is lacking which would give them real meaning. The words may be repeated, parrot-like, but they are far from being sharp tools of understanding and self-expression.

Eastman Classroom Films teach word meaning through the vividness of actual visual experience. A film is shown. The teacher discusses it. The pupil relates the words of her discussion to the vivid pictures and action on the screen. The words become charged with significance.

At the same time, the film supplies information that inspires ideas. The pupil seeks to express himself... searches for the words he needs. In both these ways Eastman Classroom Films *induce* vocabulary... the prime requisite of education.

* * * * *

Eastman Classroom Films are not a substitute for either the teacher or for long established classroom methods and devices. School authorities are beginning to realize more and more the significant value of these films in *supplementing* other teaching devices. As a result they are being widely used, in the United States and in thirty foreign countries.

The makers of Eastman Classroom Films are glad to answer questions relative to the cost, application, subject matter and other phases of this modern teaching aid. On occasion, practical demonstrations can be arranged. Write for full details: Eastman Teaching Films, Inc. (Subsidiary of Eastman Kodak Company), Rochester, New York.

# EASTMAN CLASSROOM FILMS

# News of the Month

## Rural Problems to Occupy High Place on N. E. A. Program

One of the most significant movements ever attempted by educators to stimulate interest in rural schools and progress in country life will begin at the sixty-ninth annual convention of the National Education Association in Los Angeles, June 27 to July 4, 1931, according to a news release from association headquarters.

Under the leadership of Dr. Willis A. Sutton, president, National Education Association, and superintendent of schools, Atlanta, Ga., a program is being prepared with special emphasis upon the topic, "Improvement of Educational Opportunities for Rural Children."

Various departmental meetings will include: the department of business education; the department of classroom teachers; the department of lip reading; the department of vocational education; the American Classical League; the National Secondary Education Association; the National Congress of Parents and Teachers; the department of adult education; the department of science instruction; the department of supervisors and teachers of home economics; the department of social studies; the department of elementary school principals; the National League of Teachers' Association; the National Council of Education; the department of visual instruction; the department of rural education.

President Sutton has extended a special invitation to every county superintendent in the nation to attend this convention, and to plan to have his county represented in addition by one classroom teacher from the rural schools. This invitation, issued after extensive travel throughout the United States in which President Sutton has been organizing groups of teachers and patrons of the schools for more enthusiastic service in agricultural communities, has been widely accepted.

He is urging the equalization of funds for school support which will provide farm boys and girls at least the minimum educational opportunity that is now being provided for the children of urban centers. He urges that county superintendents be selected by boards constituted to examine their qualifications instead of by ballot on the basis of popularity or political affiliation. He advocates increased qualifications of rural teachers, the adoption of health programs, the consolidation of units of administration and courses of study adapted to the present and future needs of boys and girls on the farm.

For the consideration of these problems, President Sutton has invited editors of agricultural publications, rural sociologists, editors of the rural press and other leaders of country life to meet with the representatives of rural schools, professors of rural education in colleges and universities and other leaders in American education at the convention in Los Angeles.

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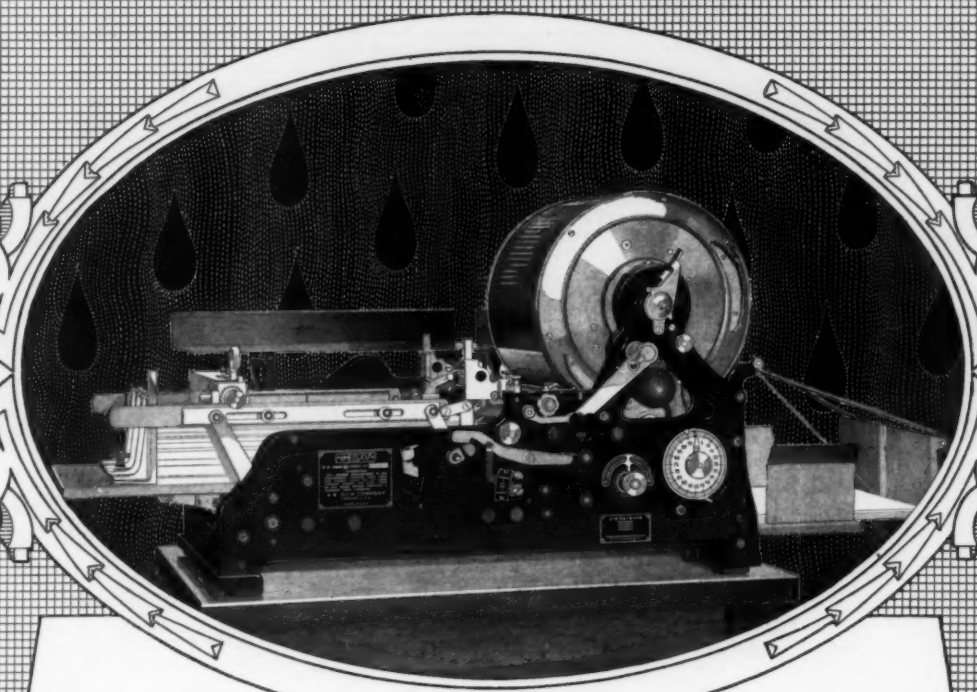
## New College of Architecture at Southern California

The former school of architecture of the University of Southern California is now the college of architecture, according to a recent announcement by Dr. R. B. von KleinSmid, president of the university. With entrance direct from high school, the college of architecture now provides for five years of continuous study, whereas formerly architectural students were required to spend two years in the college of letters, arts and sciences before entering the three-year school of architecture.

"Unmistakably, the present trend of architecture is toward a more vital and creative expression of present day conditions," says Dean A. C. Weatherhead of the architectural college. "In this movement the Pacific-Southwest is taking an important part. With its Spanish traditions, its colorful environment and its freedom from extremes of heat and cold, this region offers an excellent field for the development of modern architecture including the closely related fine arts, and in many respects its art is rapidly becoming distinctive of the locality. Its unique style is more nearly like that of the Mediterranean than any other form, but this region is not aping any other section of the world. The college of architecture is fostering the spirit of this new architectural trend, and students from other parts of the world are coming here to study the new developments. Already it has been demonstrated that the new expression is also best adapted to the demands of the Latin-American countries to the south."



## SCHOOL RELIEF!

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# MIMEOGRAPH

EDISON-DICK MIMEOGRAPH CHICAGO

# News of the Month (Cont'd)

## Porto Rico to Receive Benefits of Vocational Education

The benefits of the Federal vocational education and vocational rehabilitation legislation have been extended to Porto Rico, according to Dr. J. C. Wright, director, Federal Board for Vocational Education, who has just returned from a protracted visit to the island. Doctor Wright's trip to Porto Rico was made at the request of Gov. Theodore Roosevelt. The purpose of his visit was twofold: to assist in preparing insular legislation which would enable Porto Rico to accept the benefits of vocational education and vocational rehabilitation extended to it during the last session of Congress, and to assist in formulating plans for organizing a vocational education and rehabilitation program.

Under the terms of the vocational education bill now pending in the Porto Rican legislature, there would be created an insular board for vocational education composed of the commissioner of education, as chairman and executive officer; the commissioner of agriculture and industry, and the commissioner of labor. The bill provides for vocational education in agriculture, trade and industry, and home economics, and for a vocational rehabilitation service for disabled persons.

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## President Pays Tribute to Tuskegee on Its Fiftieth Anniversary

Commemorating on April 14 the fiftieth anniversary of the founding by Booker T. Washington of Tuskegee Institute, at Tuskegee, Ala., for Negro students, President Hoover in a radio address traced the last fifty years of the development of the Negro race during which it has "multiplied its wealth more than 130 times, has reduced its illiteracy from 95 per cent to 20 per cent and reduced its death rate by one-half."

Tuskegee Institute, Mr. Hoover said, has contributed greatly to the movement developed by the Interracial Commission in the Southern States "where problems of interracial adjustment are presented on a large scale."

"The greatest single factor in the progress of the Negro race has been the schools, private and public, established and conducted by high-minded, self-sacrificing men and women of both races and all sections of our country, maintained by the states and by private philanthropy, covering the whole field of education from primary school through to college and university," Mr. Hoover continued. "These public and private schools, particularly under the leadership of Tuskegee and other universities and colleges, have been the most effective agents in solving the problems created by the admission to citizenship of 4,000,000 ex-slaves without preparation for their new responsibilities. That such a revolution in the social order did not produce a more serious upheaval in our national existence has been due to the constructive influence exerted by these educational institutions.

"The nation owes a debt of gratitude to the wisdom and constructive vision of Booker T. Washington, the founder of Tuskegee. His conception of education based fundamentally upon vocational and moral training has been worthily continued by his able successor, Dr. R. R. Moton, who likewise deserves the gratitude of the nation."

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## Results From National Teacher Survey Are Gratifying

Returns to the questionnaires sent out by the United States Office of Education in conducting a national survey on the education of teachers are pouring into the Department of the Interior at the rate of from 12,000 to 25,000 per day, Ben W. Frazier, assistant to the director, stated recently.

Already 500,000 replies have been received from the 1,000,000 questionnaires sent out.

The Office of Education is highly gratified over the cooperation of the teachers in assisting so admirably in the study. From these questionnaires many details on teaching qualification, experience, and supply of teachers, of whom there are 965,000 in the United States, will be assembled and tabulated. For the first time, educators and the American people will have all the facts on this profession.

To take care of the deluge of replies, twelve additional employees have been put to work. If one employee had to open the letters alone, it would require more than two and one-half years.

This questionnaire represents the most prodigious of its kind ever undertaken by the Office of Education both as to the number of persons addressed and as to the nature of the inquiries.

Figure 235-N
Acid Proof Laboratory Desk Sink

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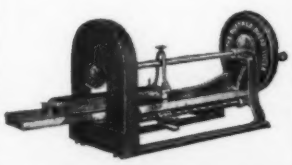
"BUFFALO"
Bread Slicer
CUTS EVERY SLICE UNIFORM!
Saves 5 to 6 slices on every loaf over hand slicing, by cutting each loaf right down to the end.
*2 sizes for hand or motor.*



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# News of the Month (Cont'd)

## College of Fine Arts Approved for University of Illinois

A college of fine and applied arts for the University of Illinois has been approved by the university board of trustees. This brings the total colleges on the Champaign-Urbana campus to seven, in addition to four schools. Three units—the college of medicine, the college of dentistry and the school of pharmacy—are in Chicago.

This new college has been made possible by the coordination of certain fields of work now being offered by the institution, which have a common point of view.

The movement has been under consideration since 1921. The new college will include the school of music, department of architecture, department of art and design, division of landscape architecture, including the option in city planning.

## Summer School for Janitor-Engineers Is Announced

The annual summer school for janitors, engineers and custodians of school buildings that is conducted by the board of education, Minneapolis, is to be held this year from June 15 to 20.

The summer training work is divided into three main divisions as follows: housekeeping and sanitation; heating and ventilating; maintenance and management. It is open to janitors, engineers and custodians from any part of the United States.

The work will be in charge of George F. Womrath, director, Leslie C. Helm, principal, and K. P. Grabarkiewiez, instructor.

## Syracuse University Plans Unusual Demonstration Schools

Teachers College, Syracuse University, accepts the challenge to demonstrate under actual public school conditions the new educational principles and methods that have grown out of John Dewey's revolutionary philosophy of education.

Two noted educators who have been eminently successful in operating private schools of the progressive type have agreed to organize and direct demonstration schools at the Syracuse summer session. School officials and teachers who have questioned the applicability of the new education to public school conditions will have a chance to "see for themselves." Syracuse will provide a unique experiment intended to show what can be done in a public school with public school children utilizing a curriculum based on the next half year of work the children are expected to complete.

Burton P. Fowler, head master, Tower Hill School, will be in charge of the junior high school division. Dr. Ruth Andrus, former director, child welfare institute, Columbia University, and present head of the joint Rockefeller and New York State Education Department program of parental and childhood education, will direct the kindergarten and primary schools.

## Maryland's County Schools Fare Well in State Budget

The county schools of Maryland will receive $2,764,000 of the $5,326,000 recommended for the 1932 state school budget. City schools will receive $1,487,000. The remaining $1,075,000 will be distributed between the state teachers' retirement system, the four normal schools, the state education department and other services.

## University of Virginia President Dies Suddenly

Dr. Edwin A. Alderman, president of the University of Virginia since 1904, and long recognized as one of the leading educators of the South, died from a stroke of apoplexy while on his way to Urbana, Ill., to attend the inauguration ceremonies for Dr. Harry Woodburn Chase as president of the University of Illinois.

Doctor Alderman was a lifelong friend of Woodrow Wilson and achieved national prominence when he was selected by Congress as the speaker for its joint session in honor of the war president on December 15, 1924.

In educational circles Doctor Alderman was known as the evangel of a new educational era in the South. He was a staunch advocate of universal education, and many of his views were adopted by the General Education Board of which he was a member.

*One of the unusual photographic effects in the all-talking screen version of Fannie Hurst's popular novel, "Lummox." Courtesy of United Artists.*

*All night long the soggy swish of scrub brushes, the rancid odor of water-flooded floors — everywhere pools of oozing dampness.*

● Troops of weary women have been taking part in such midnight performances night after night—year after year. Countless buildings—offices, banks, institutions—have furnished the setting. With pathetic realism the performers have played their parts, as best they could, in the ineffectual battle with dirt and grime.

Then in stepped the censor. "This primitive business can't go on. It's unsanitary —inefficient—costly! Away with scrub brushes and pails!"

And so was ushered in the new method of floor maintenance now used in thousands of modern buildings. A modern, efficient, economical way of preserving and beautifying floors with Johnson's wax. Wood, linoleum, composition, tile, cork, in fact every kind of floor.

Today one person does the work of six scrubwomen and does it better, more thoroughly. Waxed floors never have to be scrubbed. They are *sealed* against dirt. Johnson's wax forms a hard, transparent film which protects floors from wear and disfigurement. Dirt can't penetrate this invisible armor. Only an occasional waxing is necessary. The maintenance cost is much less than with the old methods.

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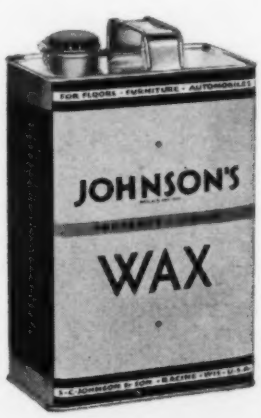


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# News of the Month (Cont'd)

## New Catholic School Is Dedicated at Newport News, Va.

St. Vincent's School, Newport News, Va., was recently dedicated with appropriate ceremonies.

In the dedication address, the Rev. John A. Kelliher, pastor, St. Peter's Church, Richmond, Va., said: "We have many excellent schools in various sections of our Richmond diocese, but none of them is more complete, none is more thoroughly equipped, none more efficiently appointed than the school in St. Vincent's Parish."

The new St. Vincent's School is a model of school architecture. The exterior is of colonial face brick, trimmed with precast concrete stone. It is of simple design, the only ornament being in the Gothic main entrance, which is crowned with a statue of St. Vincent de Paul. The school contains eleven large classrooms, each of which is equipped with a built-in wardrobe, bookcase and storage cabinet. There are outlets for a radio loudspeaker in each room, controlled by a radio in the principal's office.

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## National Recreation Association Meets in White House

The National Recreation Association at the twenty-fifth anniversary meeting of its board of directors in the Cabinet meeting room of the White House on April 13 adopted a resolution favoring a foundation or limited period endowment of not less than $10,000,000 as being needed for the national recreation movement.

The purpose of the meeting which was held upon the invitation of President Hoover was to review the association's work of twenty-five years, to discuss present needs in the field of public recreation and to make plans for the work in the next twenty-five years. The event commemorated a meeting of the founders of the association in the White House on April 12, 1906, at the invitation of President Roosevelt.

President Hoover welcomed the officers and members of the association's board in a few remarks. Three members of President Hoover's Cabinet attended the meeting and expressed the appreciation of the Government departments served by the association. They were the Secretary of the Interior, Ray Lyman Wilbur; the Secretary of Agriculture, Arthur M. Hyde, and the Secretary of the Navy, Charles F. Adams.

President Hoover in his address of welcome emphasized that the association has taken significant part in the recreational development of the nation.

The meeting was opened by Joseph Lee, of Boston, president of the association, in an address in which he declared that "leisure for everybody, a condition we in America are now approaching, is the most extraordinary chance ever granted to a nation. It means the coming of something unheard of in all history—the opportunity for every man to live." Before the coming of leisure, "life" had been the monopoly of the very few, he added.

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## School Trustees' Problems to Be Considered at Institute

School trustees' problems will be considered at a one-week institute of public administration to be held at the University of Southern California, June 8 to 13. The institute will be attended by city, county and state officials and municipal employees of the Pacific-Southwest. Sessions will be conducted by noted authorities in the science of government.

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## Happy Valley in the Ozarks Chosen for Site of Boys' School

Charmant has been chosen as the name of a boys' school that is to be built soon overlooking Happy Valley, one of the beauty spots of the Missouri Ozarks. The school site, about a hundred miles from St. Louis, contains 1,500 acres of picturesque mountain land. Work has already begun on a group of buildings which will include a club house, a pavilion and a group of cottages of rustic construction.

The course will be identical to that of any first-class school or academy, according to its founder, Anna White, St. Louis real estate operator. The school is expected to be ready for opening in September. Buildings will be added to the group as they are needed. The site was donated by Elmer E. Clinton, Steeleville, Mo.

# Let us estimate Your soap requirements

*Our nation-wide soap and cleanser service eliminates waste, saves you money—has many advantages*

TO GIVE school authorities an easier, quicker, and far more economical way to deal with their cleaning problems, we have instituted a scientific soap and cleanser service for schools. This service has many advantages to you. Our personal representative calls upon you, and analyzes every phase of your cleaning problems. He has at his command all of the combined resources of Colgate and Palmolive and Peet Brothers—a wide variety of scientific soaps and cleansers. He specifies a proper cleansing material for each purpose. In this way you eliminate all uncertainty and waste. Valuable time is saved in purchasing, receiving, recording, storing. Costs are reduced, and money is saved by quantity buying.

Write for our representative when you make up your yearly budget this year. Or better, write us now and tell us the proper time for him to call. You will save yourself hours of time and trouble, as well as dollars in soap costs. Address the Colgate-Palmolive-Peet Company, Palmolive Building, Chicago, Illinois.

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½ oz., 1 oz., 1½ oz., 2 oz. and full size cake.

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For those who desire soap in liquid form with the proper soap content for efficient use. Made to meet government standards. We can also supply liquid soap dispensers.

5-gallon and 55-gallon drums.

**SUPER SUDS**

Super Suds the original bead form of soap. Instantly soluble, highly efficient, a nationally recognized product especially useful for washing dishes and general laundry purposes.

**SEA FOAM, OCTAGON SOAP POWDER**

Your choice of two recognized soap powders, better than government standard. For use on tile—terrazzo—marble—wood and cement floors—with a mop and pail or mop truck. Also for kitchen use.

Packages 100 lb. kegs—175 lb. barrels—250 lb. barrels.

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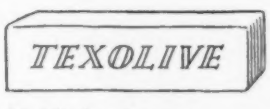
A properly blended scouring cleanser containing volcanic ash and soap. Excellent for tile, terrazzo and marble floors—also for scouring vitreous enamel washroom and lavatory fixtures.

12 oz. cans, 125 lb. kegs, 275 lb. barrels.




50 4-lb. bars in a case.

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# In the Educational Field

GEORGE C. COLE took over the duties of the superintendent of public instruction for Indiana on March 16, succeeding ROY P. WISEHART who has served since September 1, 1927.

WALTER W. BORDEN, superintendent of schools, South Bend, Ind., for the last twelve years, has resigned.

DR. HARRY CLARK, president, Judson College, Marion, Ala., has been elected to succeed HOMER P. SHEPHERD as superintendent of schools, Knoxville, Tenn. DOCTOR CLARK was formerly dean of the school of education, University of Tennessee, Knoxville.

F. E. CORBIN, superintendent of schools, Southbridge, Mass., has retired after forty-five years of service in the public schools.

MILTON S. COX, superintendent of schools, Vinton County, Ohio, has been elected to head the school system of Pickaway County of that state.

GEORGE DEWOLF, superintendent of schools, Creston, Iowa, has accepted the superintendency of the schools of Downer's Grove, Ill.

H. R. BROWN, principal, William C. Condit School, Ashland, Ky., has been elected superintendent of schools, Paintsville, Ky.

CHARLES F. WILLIS has been appointed to succeed DR. ROZELLE BERRYMAN as principal of the Gwynn's Falls Junior High School, Baltimore. MR. WILLIS was, until his appointment, principal of School No. 208, Baltimore.

W. L. STEPHENS, superintendent of schools, Long Beach, Calif., has announced his intention to retire at the end of his present term of office, August 1, 1932.

LILLIE O. BAKER, superintendent of schools, Pueblo County, Colo., died recently.

LEON M. FARRIS, superintendent of schools, Putnam, Conn., has resigned to accept the superintendency at Athol, Mass.

DR. TILDEN SCHERER, president, King College, Bristol, Tenn., for the last twenty years, has resigned. He will be succeeded by Dr. Charles T. Henry, who is associate president of Sullins College, Bristol.

BEATRICE FARRELL has been appointed principal, Franklin School, Erie, Pa., filling the vacancy created by the death of NORA MCCARTHY.

WAYNE L. DOUGLAS, principal, Schaaf Junior High School, Cleveland, has been named to succeed GUY W. CHIPMAN as principal of Brooklyn Friends School, Brooklyn, N. Y.

OSCAR C. GALLAGHER, for twelve years superintendent of schools, Brookline, Mass., has announced his resignation.

LOUIS R. POTTS, Columbus, Ohio, has been named superintendent of schools, Moundsville, W. Va., to succeed JOHN C. SHREVE, resigned.

E. C. DEERING, superintendent of schools, Marshall, Tex., has been reelected for a term of two years. MR. DEERING has served as superintendent for the past six years.

J. F. LAUTENSCHLAGER, superintendent of schools, Conesville, Ohio, has been chosen to succeed the late H. B. PIGMAN as superintendent of the schools of Coshocton County, Ohio.

T. E. EMERSON, formerly superintendent of schools, Butner, Okla., has been elected to head the schools of Sasakwa, Okla., succeeding FORREST E. CAVIN.

GEORGE D. BROWN is the newly elected superintendent of schools, Huntsville, Ala.

FRANK J. BUCKLEY, superintendent of schools, Derby, Conn., has resigned to accept the superintendency of the school system in Tuckahoe, N. Y.

L. K. LOVENSTEIN, Poca, W. Va., has been named superintendent of schools, St. Albans, W. Va., succeeding H. C. VAN CAMP, resigned.

F. E. PRATT, superintendent of schools, Parkston, S. D., has been named superintendent at Howard, S. D., succeeding M. H. HOGEN who will head the schools of Beresford, S. D., for the coming year.

ARTHUR L. PERRY will succeed WILLIAM F. LITTLE as superintendent of schools, Rahway, N. J., when Mr. Little retires on July 1 after fourteen years in that office. For the last year MR. PERRY has been director of educational research in the elementary schools of Rahway.

# SUPERINTENDENTS AND PRINCIPALS

# . . . don't let *slump* and *squint* ruin your students!

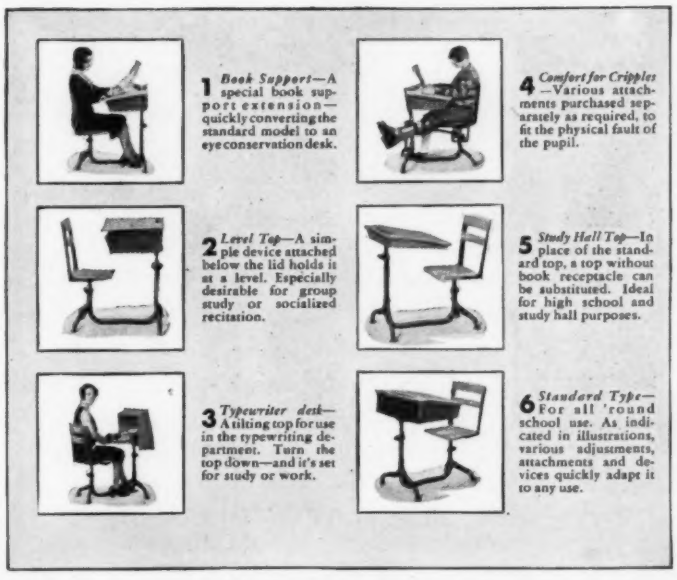
## KNOW WHAT CONSTITUTES CORRECT-POSTURE SEATING BEFORE YOU BUY!

THE "American" All-Purpose Universal Desk . . . *one* type of desk that serves the modern classroom in *six* important ways. The new-day product of the research laboratories of the American Seating Company. Scientifically designed . . . sensible, durable . . . all that high quality steel and wood in the hands of craftsmen can contribute to school desk value.

The illustration at the right concisely sets forth its posture-correctness, and its sight conservation features. In a minute you can see how this outstanding desk serves to assist materially the proper physical development of your students.

When you consider seating—be sure you have all the facts of the "American" All-Purpose Universal Desk. Be sure that your analysis and understanding of posture-correctness goes beyond a mere acceptance of the phrase. For we, who have given to this one subject exhaustive and exacting research, know that correct posture seating demands a definite scientific knowledge. That the subject should not be trifled with. That to know what constitutes correct-posture under all conditions is essential to your choice of posture-correct school seats.

The coupon brings you important and authentic information. Please use it!



**1** *Book Support*—A special book support extension—quickly converting the standard model to an eye conservation desk.

**2** *Level Top*—A simple device attached below the lid holds it at a level. Especially desirable for group study or socialized recitation.

**3** *Typewriter desk*—A tilting top for use in the typewriting department. Turn the top down—and it's set for study or work.

**4** *Comfort for Cripples*—Various attachments purchased separately as required, to fit the physical fault of the pupil.

**5** *Study Hall Top*—In place of the standard top, a top without book receptacle can be substituted. Ideal for high school and study hall purposes.

**6** *Standard Type*—For all 'round school use. As indicated in illustrations, various adjustments, attachments and devices quickly adapt it to any use.

# American Seating Company

Makers of Fine Seating for Schools, Churches and Public Auditoriums
*General Offices:* 14 East Jackson Boulevard, Chicago, Ill.
*Branches in All Principal Cities*

**FREE** Poster on posture furnished for each classroom. Just send the coupon . . . and with it we will mail you several authoritative booklets on posture and seating. 62,000 of these posters have been sent to schools the country over. Size 17½ by 25 inches—printed in 3 colors—it graphically shows children why they should sit erect. Hang one in every classroom in your school. Please use the coupon.

AMERICAN SEATING COMPANY, 14 East Jackson Blvd., Chicago, Ill.
Please send me, free and without obligation, a copy of your Posture Poster on correct sitting. Principals and superintendents will be supplied with a poster for each room, on request. Please indicate the number of classrooms.

(N.S. 5)

*Name* _____ *Address* _____

*Position* _____ ☐ Number of classrooms.
(Indicate here whether you are Superintendent, Principal or Teacher)

**INSIST ON MODERN, POSTURALLY CORRECT SEATING**
**DON'T LET OBSOLETE SEATING HAMPER CHILD PROGRESS**

# In the Educational Field

MELVIN GREEN CLARK, superintendent of schools, Sioux City, Iowa, died recently following a heart attack. MR. CLARK had served as superintendent in Sioux City since 1911. Prior to that he had held superintendencies in Greenville, Princeton and Streator, all in Illinois.

DR. WILLIAM WASHINGTON THOMAS, for many years president of Scarritt-Morrisville College, superintendent of schools, Springfield, Mo., for ten years and head of the psychology department, Southwest Teachers College, died recently. He founded the Missouri State Teachers' Association and served as its president.

E. S. SHOEMAKER, Oriskany Falls, N. Y., succeeds F. S. VANDEWATER as principal of the Norwood High School, Norwood, N. Y. MR. VANDEWATER has resigned because of ill health. E. J. BOND, Sidney, N. Y., is MR. SHOEMAKER'S successor at Oriskany Falls.

R. R. STUART, principal, Penn and Marshall Schools, Erie, Pa., has been made the new principal of Columbus School of that city, succeeding J. L. COUGHLIN who died in December. ANNA WILKINS succeeds MR. STUART.

WILBUR J. ROCKWOOD, headmaster, Everett High School, Everett, Mass., will retire in June, having reached the age of seventy.

DEAN J. C. ROGERS, Piedmont College, Demorest, Ga., has been elected president, Association of Georgia Colleges, for the coming year. DEAN E. H. SCOTT, Georgia State College for Women, Milledgeville, is vice-president and DR. W. D. HOOPER, University of Georgia, secretary and treasurer.

URIAH J. HOFFMAN, supervisor of rural schools, state department of public instruction for Illinois, since 1906, died recently at the age of seventy-five. The office of supervisor of rural education was established in Illinois in 1906 and was the first of its kind in the states.

DR. MERTON E. HILL, formerly principal of the Chaffey Union High School, Ontario, Cal., has been appointed professor of education at the University of California to take effect July 1.

WAYLAND E. STEARNS, for more than thirty-one years principal of Barringer High School, Newark, N. J., has retired.

ARCHIE R. CLIFTON, superintendent of schools, Monrovia, Cal., has been named to succeed H. S. UPJOHN as superintendent of schools for Los Angeles County. MR. UPJOHN will leave shortly for a two-year world cruise.

DR. OREN HOWARD COBB, for eighteen years superintendent of the Syracuse State School for Mental Defectives, Syracuse, N. Y., died recently.

JAMES W. BROOKS, principal of the Altgeld Elementary School, Chicago, is retiring after twenty-five years of service. He was honored recently with a luncheon which was attended by sixty teachers.

JOHN CAREY TAYLOR, formerly principal, Poe Junior High School, New York City, has been appointed superintendent of schools, Baltimore, succeeding JOHN COULBOURN, resigned.

JOHN C. SHREVES, for the last ten years superintendent, Moundsville Independent District Schools, Moundsville, W. Va., has resigned, his resignation to take effect at the close of the present school year.

THE REV. PATRICK J. MAHAN, regent, Loyola School of Medicine, Chicago, has been named president, Creighton University, Omaha, to fill the vacancy caused by the death of the REV. WILLIAM AGNEW.

A. W. FORTUNE, superintendent of schools, Massena, N. Y., for the last five years, has resigned. He will be succeeded by E. G. SIMMONS of Syracuse, who was superintendent of the Massena Schools in 1922 and 1923.

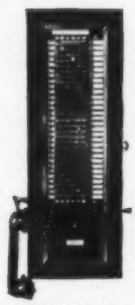
WILLIAM L. RHONE, supervising principal, North Wildwood schools, North Wildwood, N. J., has resigned. MR. RHONE has been in educational work for more than forty years.

G. O. KELLEY, superintendent of schools, Bridgeport, Neb., for the last seven years, has accepted the superintendency of the schools of Madison, Neb.

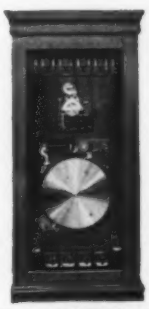
# International Supervised Time Is the Standard of Modern Schools

INTERNATIONAL CORRIDOR GONG

INTERNATIONAL CLASS ROOM CLOCK



INTERNATIONAL CROSS CONNECTING BOARD



INTERNATIONAL PROGRAM CABINET

**Grammar schools — high schools — colleges and universities. Thousands of schools both large and small in every part of the country depend upon International Supervised Time Control for the efficient government of study routine which modern administration demands.**

**International engineers have been studying program methods for many years. They have concentrated upon the development of timing devices that will fully meet the requirements of efficiency and economy of operation.**

**Prominent educators today recognize International Hourly Supervision as the highest achievement in the history of time control methods.**

**This principle, as applied to school program systems, automatically handles any kind of schedule with never a need of manual regulation. All maintenance worries are entirely abolished. Once in operation, an International Program System carries on with unvarying accuracy — always dependably and satisfactorily.**

***Ask the International Time Specialist in your vicinity for a copy of "Time Control in the School"***

INTERNATIONAL SUPERVISED

## INTERNATIONAL BUSINESS MACHINES CORPORATION

International Time Recorders and Electric Time Systems
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GENERAL OFFICES
270 Broadway
New York, N. Y.

*Branch Offices and Service Stations in All Principal Cities*

# "His school work is better since *Radio was installed*"

**RADIO instruction in classrooms is the most advanced form of teaching. Pupils progress much faster and with a sounder foundation. Teachers appreciate its aid. A great stimulus to the universal acceptance of organized broadcast instruction has been RCA Centralized Radio. As many as four different broadcast programs can be brought in to any or all class or assembly rooms. Either Radio or Phonograph reproduction is available, RCA guarantees every installation. RCA Centralized Radio installations are designed and installed with present and future trends in mind—and this backed by the world's greatest radio engineering organization.**

## RCA Centralized RADIO

Engineering Products Division
RCA VICTOR CO., Inc. Camden, N. J.
*A Radio Corporation of America Subsidiary*

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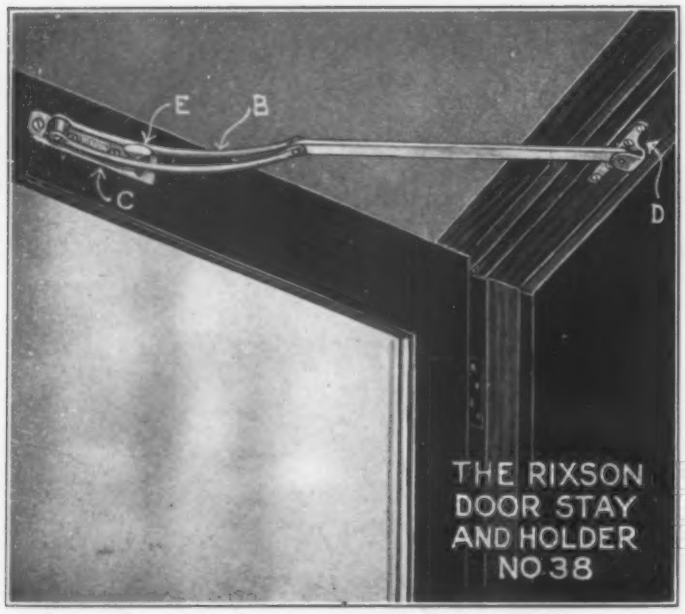
*Engineering Products Division,* F5
*RCA Victor Co., Inc., Camden, N. J.*
Descriptive pamphlets of this system and photographs of typical installations are available to architects, building owners and educators.
Without obligation, we shall gladly prepare plans and estimates for installations of any size.
*Name*.....
*School*.....
*Address*.....




# Check the Damage!

## Doors Thrown Open Ruin Hinges Unless Protected by

**RIXSON NOS. 38 & 39**

## *Door Stay and Holder*

Ruin faces any hinge of an exterior school door opening against a brick reveal, a rigid fixed door stop, or an inflexible chain. You cannot enforce perfect carefulness on school children or college students—down to the detail of how to open doors.

In Rixson Door Stays and Holders curved spring bronze arms break the shock of a strong pull. The arms pull taut and yield, easing the excess force exerted.

An added feature is the door holding device. In No. 38 a thumb piece holds the door at 90° until released. In No. 39 the hold and release are automatic. In both the device fits neatly up under the head jamb, masked by the upper door frame. *Get your architect to show you the details in Sweet's Catalog.*

**THE OSCAR C. RIXSON COMPANY**
**4450 Carroll Avenue** **Chicago, Ill.**

*New York Office:* 101 Park Ave., N. Y. C.

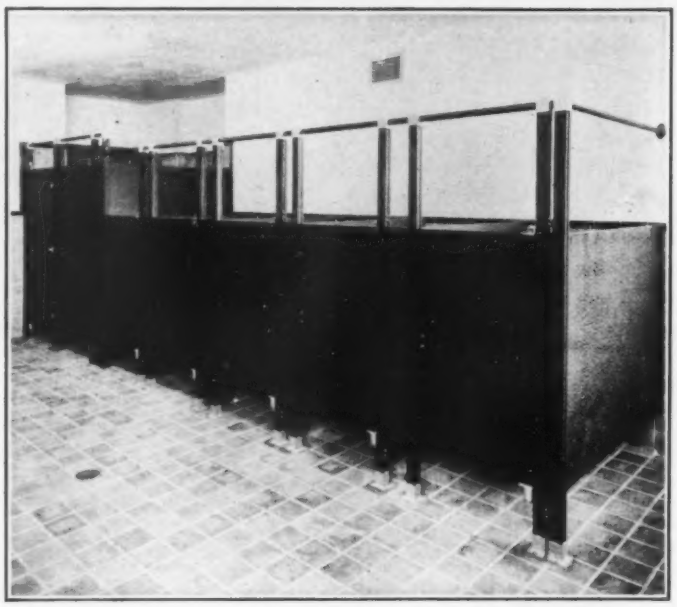
Philadelphia Atlanta New Orleans Los Angeles Winnipeg

RIXSON

## Builders' Hardware

Overhead Door Checks
Floor Checks, Single Acting
Floor Checks, Double Acting
Olive Knuckle Hinges
Friction Hinges
Casement Operators and Hinges
Concealed Transom Operators
Adjustable Ball Hinges
Butts, Pivots and Bolts
Door Stays and Holders

# FOR SCHOOL TOILETS AND SHOWERS



## What Are Your Toilet Rooms Teaching?

IN EVERY school there are silent teachers—not on your staff, but teachers nevertheless—your school toilet rooms. Quite unknown to you they may belittle the importance of health and sanitation, or they may encourage cleanliness of body and mind in your pupils.

Sanymetal Steel Toilet Partitions assure you of toilet rooms which reflect the highest ideals of cleanliness. They are built for easy sanitation, attractive appearance, and hard wear. Adaptable to limited and difficult space arrangements. Sanymetal has perfected a new "Shrivel" Finish, too, which is especially resistant to mars and scratches.

Doesn't the study of hygiene begin in the toilet room? Think it over—and check up on those "silent teachers" in your school.

**Sanymetal Products for Schools are: Toilet, shower, dressing and urinal compartments. Corridor and smoke screens. Metal doors and wainscot. Sanymetal Gravity Hinges. Write for New Catalog No. 30.**

**THE SANYMETAL PRODUCTS CO.**
**1722 Urbana Road, Cleveland, O.**

# Sanymetal STEEL PARTITIONS

# Where thoughts are not troubled by NOISE...

## A CORNER IN THE COUNTRY... OR A CORK-QUIETED SCHOOL ROOM

*Corkoustic brings a quiet atmosphere to the classrooms of the Stedman School, Denver, Colo. Here two spray coats of cold water paint have been applied to the Corkoustic.*

IN everyone's memory there is the recollection of a soothing hour by a placid pool—a moment on the crest of a hill—some place where thoughts are undisturbed. School rooms lined with Armstrong's Corkoustic, the cork material for sound-quieting and acoustical treatment, offer that same quiet atmosphere. Such rooms make school work easier by hushing disturbing noises, silencing pattering feet in corridors, muffling closing doors and outside conversation.

Decoratively, too, the rich, brown panels of Corkoustic are ideal for all types of school decoration. Colors and designs, if desired, are readily obtained with cold-water paints and stencils.

Corkoustic is also a highly efficient insulating material. Rooms lined with Corkoustic are cooler in summer, warmer in winter. And fuel costs are reduced.

Let us send you a copy of "Armstrong's Corkoustic." Your copy with samples of Corkoustic will be sent free on request. Address Armstrong Cork and Insulation Co., 939 Concord Street, Lancaster, Penna.

Armstrong's Ⓐ Product

*To eliminate noise and absorb vi[illegible]tion of moving machinery, we suggest the use of Armstrong's Vibracork. Fans and motors of the ventilating system, pumps, printing presses, and other types of equipment can be effectively silenced by resilient cork. And machines last longer when vibration is checked. All the advantages of cork-cushioning can be secured at very moderate cost. Write for our pamphlet describing the practical applications of Armstrong's Vibracork.*

# *Armstrong's* CORKOUSTIC

## *The modern acoustical, insulating treatment*

# THE NEW WITT CANS

Over 8 TONS of pressure was required to crush the New WITT Can

## Outlast all Others!

**Tests at Pittsburgh Testing Laboratory Prove It . . .**

In recent compression tests at the Pittsburgh Testing Laboratory the New WITT was the least affected of eight well-known, heavy corrugated cans. Because of an improved design of corrugation, the use of special analysis steel, and many other features, the New WITT withstood a load of 17,000 pounds, while the other cans were bent and crushed in varying degree long before this tremendous pressure was reached. Think what this means in terms of extra service!

Why not test WITT Cans yourself . . . prove to your own satisfaction their superiority over others. It will pay you.

**THE WITT CORNICE COMPANY**

**2120 Winchell Ave. Cincinnati, Ohio**

# Can you clean paintwork as easily as this?

REMOVING finger prints and smudges from painted walls and woodwork need not be a troublesome task. Just try Oakite and see how easily it can be done.

Only an ounce of this effective cleaner in a pail of warm water is needed. Applied with a cloth or sponge, this seemingly mild solution works wonders. Dirt disappears in a jiffy, leaving woodwork as bright and fresh as when newly painted.

Call in our nearest Service Man. Let him show how much time and effort Oakite cleaning saves. No obligation.

Manufactured only by
OAKITE PRODUCTS, INC., 28D Thames St., New York, N. Y.

**OAKITE**

*Industrial Cleaning Materials and Methods*

# An Applicator Bottle

**furnished with our compliments in your own medicine cabinet will soon convince you that**

## MERCUROCHROME—220 SOLUBLE

**(dibrom-oxymercuri-fluorescein)**

**IS THE**

## Logical Successor to Tincture of Iodine

**FOR**

**First Aid Prophylactic and General Antiseptic Use**

**Mercurochrome stains as Iodine does, and it is the stain of Mercurochrome, as it is of Iodine, that shows just where and how effectively the germicide has been applied; it fixes the bactericidal agent in the field for a relatively permanent period which prolongs the asepsis or the sterilizing effect, and it provides for demonstrable penetration into the tissues beneath the superficial surfaces. Inasmuch as Mercurochrome is definitely proved an extremely efficient general antiseptic, it is only reasonable to consider it the successor to Iodine in this field, as it is free from the objectionable features of Iodine, for**

**MERCUROCHROME DOES NOT IRRITATE, BURN OR INJURE TISSUE**

*SELL YOURSELVES FIRST*

**HYNSON, WESTCOTT & DUNNING, INC.**

**BALTIMORE, MD.**

HYNSON, WESTCOTT & DUNNING, INC.
DEPT. N, BALTIMORE, MD.

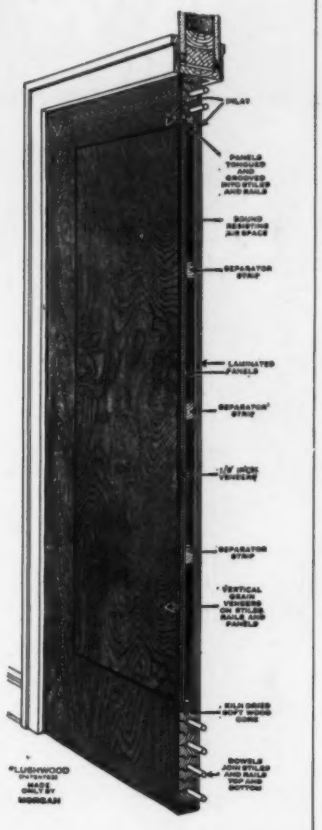
*Please send me Mercurochrome Applicator Bottle for personal use.*

*Name* .....

*Business Address* .....

# WHERE SILENCE IS GOLDEN
## —*Doors Must Assure It*

# FLUSHWOOD
(PATENTED)



IN the study hall and classroom alike, silence is golden. Nothing distracts attention so much as outside noises and disturbances coming into a room where scholars are concentrating on important lessons.

Yet hallways must be used continually. The noise of hurrying feet—the hubbub of voices—all these must go on while quiet remains in the classroom.

Flushwood—the sound resistant door—is the solution of this problem. Much more efficient than any other type door in its resistance to sound—a guardian of quiet at the threshold.

A card will bring you complete information on the advantages this new door offers. You owe it to the children to investigate before settling the door question definitely.

*Write for a copy of the new Flushwood Catalog.*

**MORGAN WOODWORK ORGANIZATION**

MORGAN COMPANY
Oshkosh, Wis. New York City

MORGAN SASH AND DOOR COMPANY
Chicago Toledo

MORGAN MILLWORK CO.
Baltimore Jersey City Greensboro New Haven Wilmington

# A 13-Inch Recess?
## *"Unbelievable!"*

Yes, but true, for the Prose-Maco wardrobe can be built in as small as a 13-inch depth recess. A 17-inch to 20-inch recess is to be recommended as ideal, but in schools to be remodeled where a saving in money is the first consideration, the ability to install a wardrobe in small depths is an important factor. Save on floor space! Save money. Install this multiple operating—single control wardrobe. Write for the new Prose-Maco catalog and visit our exhibit at the Public School Business Officials Convention, May 19-23

*Prose-Maco*
*Manufacturing Company*
1524 Holmes St. Kansas City, Mo.

Formerly Progressive School Equipment Manufacturing Company

Outstanding Prose-Maco Products: Swinging bookboard, Teacher's Combination wardrobe and restroom, Removal non-removable coat hangers, gravity book cases, umbrella stands.

*What a convenient, even expanse of blackboard space this wardrobe presents!*

# LAWLOR
## FLOOR CLEANING EQUIPMENT

WRINGERS

MOPPING TANKS

ELECTRIC SCRUBBING MACHINES

Cleaner—More Sanitary floors for Schools. Leading Schools and Universities throughout the country are installing Lawlor complete Floor Cleaning equipment, because by comparison, it is the most modern and efficient.

The Lawlor Method is the result of 32 years of experience and enables three men to do the work of five in the same time.

Lawlor All-Steel Perforated Roll Wringers are built in single and twin pail types.

Lawlor All-Steel Mopping Tanks are made in sizes to meet every requirement, 25-30-60 and 65 gals. They have separate compartments for soapy and clear water, an easy operating foot or hand wringer and all the latest improvements.

THE LAWLOR ELECTRIC MACHINE Scrubs—Waxes—and Polishes. It is of the most advanced design and guaranteed construction and built in various sizes to meet most efficiently every floor maintenance problem.

*Let us prove the real merit of the Lawlor Method by actual test on your floors and under your own supervision. Interesting literature with complete details of this "Service Test" plan will be sent on request.*

S. C. Lawlor Co.
132 N. Curtis St.
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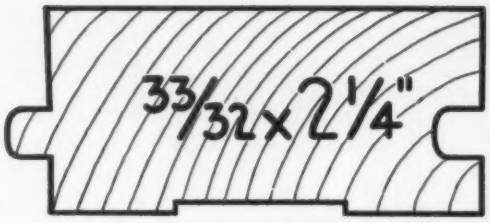
SOLD AND SERVICED BY LEADING DEALERS



# MAPLE FLOORING
## FOR SCHOOLS




The above flooring (illustration is actual size) meets all the requirements for a SUPERIOR SCHOOL FLOORING that will withstand the hard usage to which it is exposed by children's feet.

All ROBBINS FLOORING is seasoned in the open air and then mechanically dried, insuring toughness and long life.

Specify ROBBINS FLOORING
*FOR ALL SCHOOL PURPOSES*

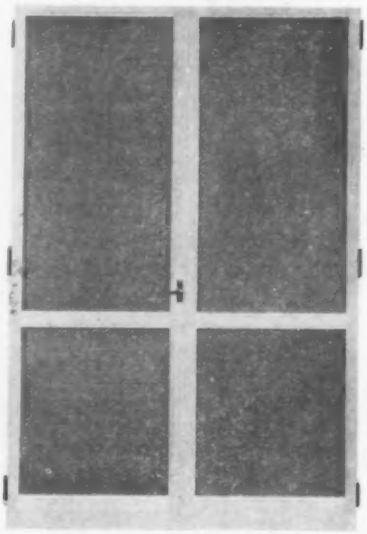
ROBBINS FLOORING CO.
RHINELANDER
WIS.



# CINMANCO
## *Hollow Steel, Bronze and Aluminum*
## SCREEN DOORS

CINMANCO All Metal Screens are permanent installations. Constructed of 14 gauge seamless tubes and securely welded at corners to make practically a one-piece door—pleasing in appearance, rigidly built, and always perfect fitting. Especially adapted for casement doors.

CINMANCO doors are furnished with 16 mesh bronze wire cloth. Equipped with special bronze locks, hinges, and flush bolts. Can be supplied in any color or grained finish to match the woodwork.



*Write for complete details*

THE CINCINNATI MANUFACTURING COMPANY
1638 Gest St. Cincinnati, Ohio



# DUNHAM CONCEALED RADIATORS

*an important development enhancing the values of*

## Dunham Differential Heating

*Write for Bulletin No. 500*

C. A. DUNHAM CO.
450 E. Ohio Street Chicago, Illinois

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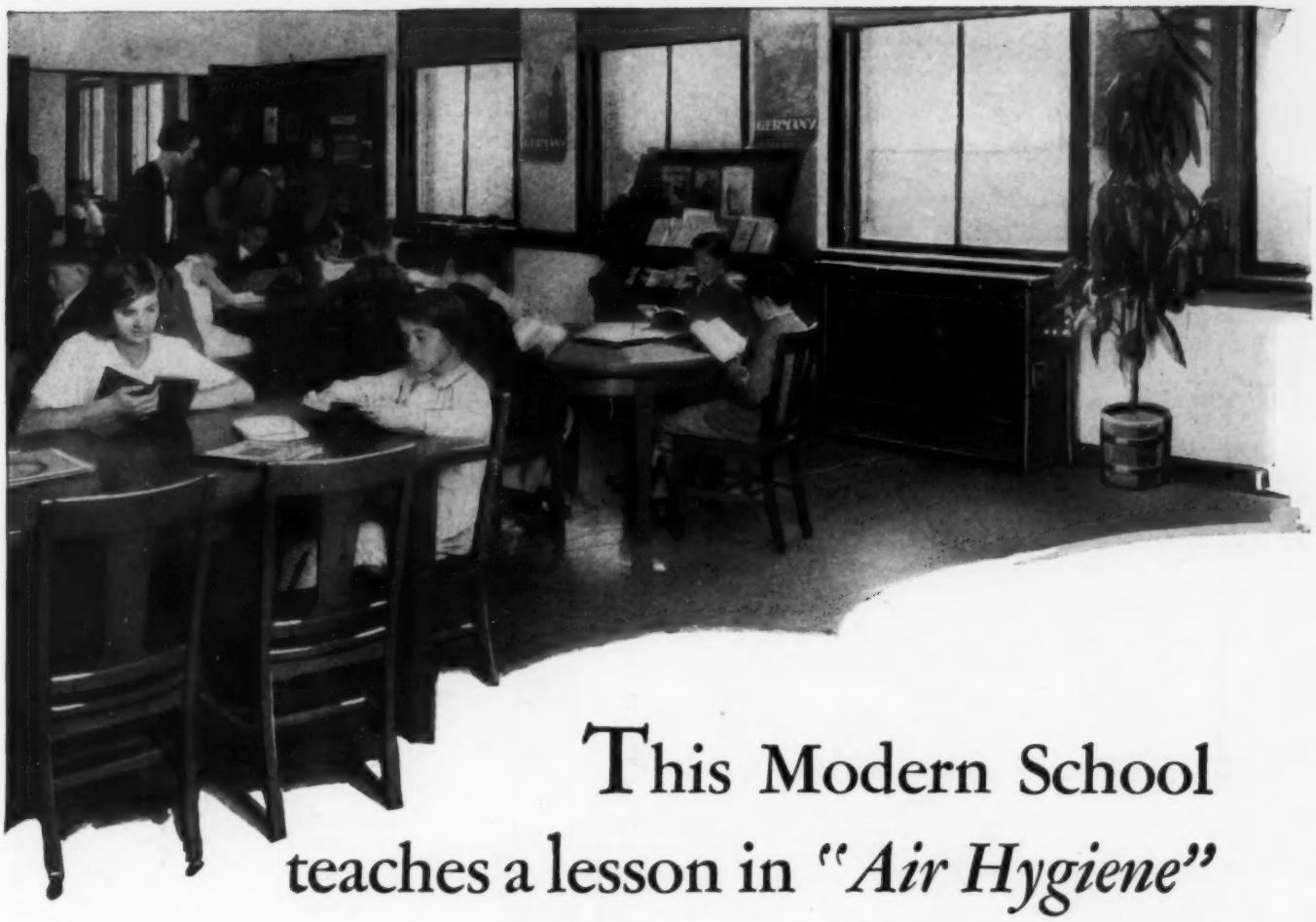


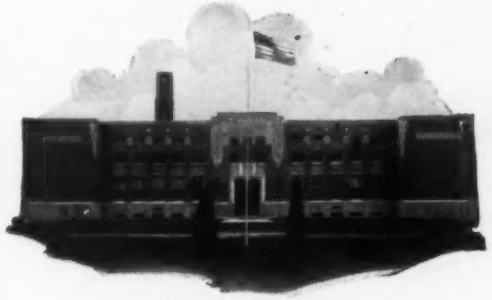
# This Modern School teaches a lesson in "*Air Hygiene*"

## ...*with 34 Sturtevant Unit Heater-Ventilators*

THESE young people are being educated to the value of pure, refreshing air by working in it, every day.

Classroom windows are closed against noise, dust, and drafts... yet the room is always filled with bracing outdoor air, filtered clean and tempered to a constant, comfortable temperature. Here in the Manheim Township School, 34 Sturtevant Unit Heater-Ventilators keep scholars and teachers free from discomfort and distraction. The units are automatically controlled...teachers are free from the constant responsibility of keeping the classrooms "well aired."

Studies of school ventilating problems lead repeatedly to the selection of Sturtevant Unit Heater-Ventilators... for old schools as well as new. Our nearest office would welcome the opportunity to lay all the facts before you.



Manheim Township Grade and Junior High School, Neffsville, Pa. *Architect and Engineer:* Henry Shaub, Lancaster, Pa. *General Contractor:* B. F. Backman, Lancaster, Pa. *Heating and Ventilating Contractor:* C. B. Weitzel, Manheim, Pa.

B. F. STURTEVANT COMPANY

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# Sturtevant Unit Heater-Ventilator

Reg. U. S. Pat. Off.

*SUPPLIES OUTDOOR AIR ~ FILTERED CLEAN ~ AND TEMPERED*

# Do they glisten like glass?

AS THE school year draws to a close, isn't it time to think of the lunch-room equipment for next year? The stewpans, bake-kettles and double-boilers will be white and brilliant. . . . the meat-platters and soup-tureens will sparkle inside and out if they are Vollrath Ware.

This ware is glass-hard, glass-lustrous. Soap-suds are enough to clean it; so that there is no reason why anything should mar its shining smoothness. Its foundation is pure steel—over which is fused enamel, in three layers, each at 1800° F. The result is lunch-room equipment that the most careless user cannot dent, whose gas-welded handles cannot tear off.

Utensils should be, above all else, sanitary. Vollrath equipment presents the utmost in sanitation. Fifty-seven years of perfecting enamel-ware are in its making. Free catalog on request. Obtain full equipment, or individual pieces, from restaurant equipment dealers. THE VOLLRATH CO., Sheboygan, Wisconsin. Established 1874.

VOLLRATH WARE

The Vollrath name in this form on the label assures you of genuine Vollrath Ware.



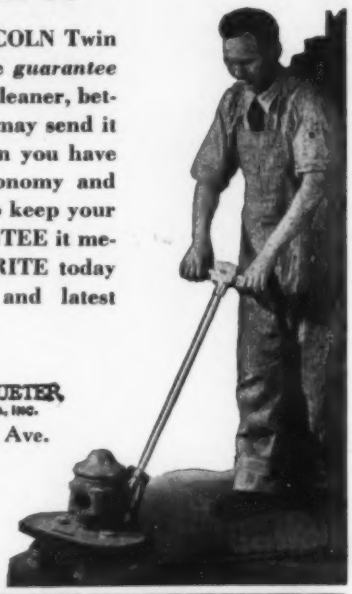
# CUT Scrubbing Polishing COSTS

## *Have Beautiful, Sanitary Floors!*

**THE LINCOLN Twin Disc definitely cuts floor cleaning cost—and, because of its Twin Disc thoroughness, gives you clean, sanitary floors that are a credit to your institution.**

## WE GUARANTEE IT—

**Let us send you the LINCOLN Twin Disc for a FREE Trial. We *guarantee* a worthwhile saving—plus cleaner, better looking floors—or you may send it back at our expense! When you have proved the LINCOLN'S economy and superior work and decide to keep your LINCOLN, we will GUARANTEE it mechanically for 5 Years. WRITE today for FREE TRIAL Offer and latest catalog.**



LINCOLN-SCHLUETER FLOOR-MACHINERY CO., INC.
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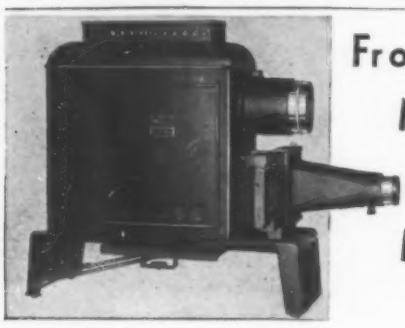
The LINCOLN Twin Disc
SCRUBS - WAXES - POLISHES





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**The LRM is a combination Balopticon for the projection of either lantern slides or opaque objects. An attachment is available whereby strip films can be used.**

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**NOISE on this SIDE**

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**ODORS DUST MOTHS AND DRAFTS CANNOT PASS THROUGH**

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**and folding partitions**

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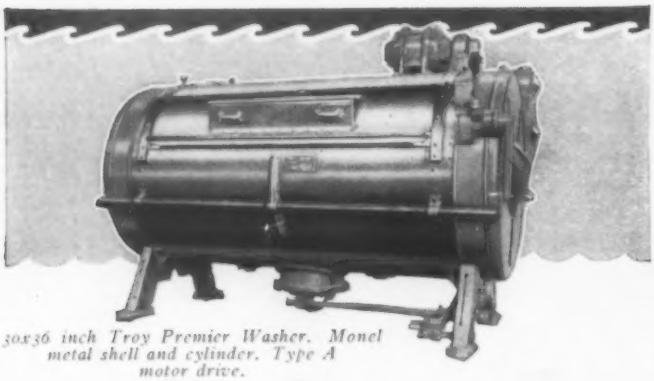

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*J. ARMSTRONG & CO., Ltd., European Agents; London, Berlin, Zurich.*

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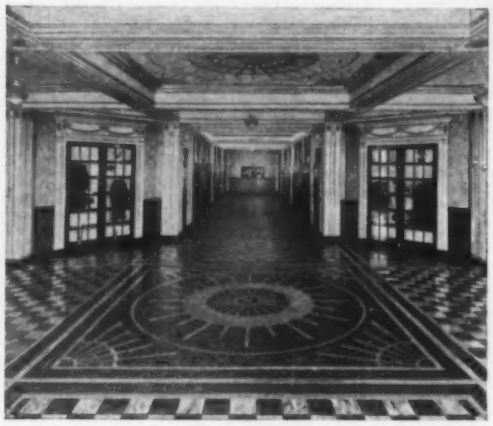

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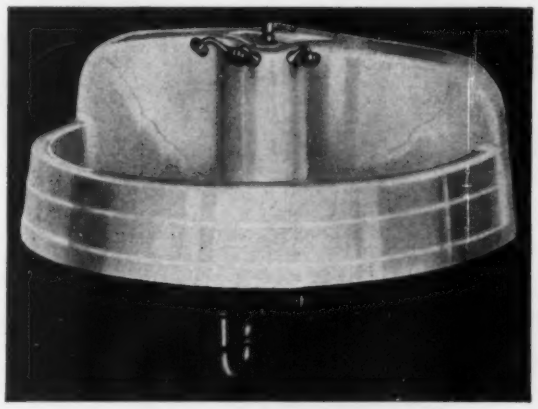

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SEMI-CIRCULAR WASH SINK

*is most sanitary and convenient for group washing*

**The EBCO acid resisting finish, individual control sprays, temperature control, automatic pressure regulation, check valves, strainers and stops, recess soap tray or liquid soap equipment are some of the features embodied in this attractive unit. An ideal wash room equipment for schools. Width 36", projects 22", depth 8".**

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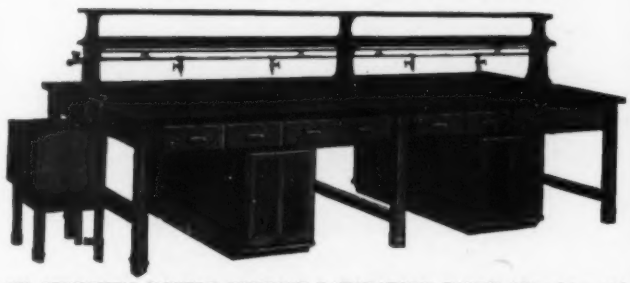

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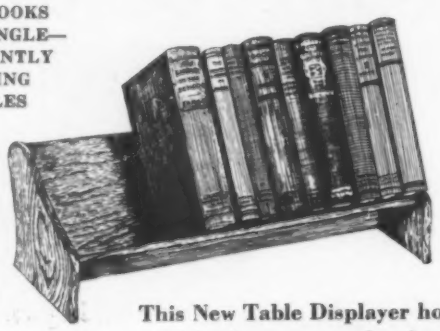

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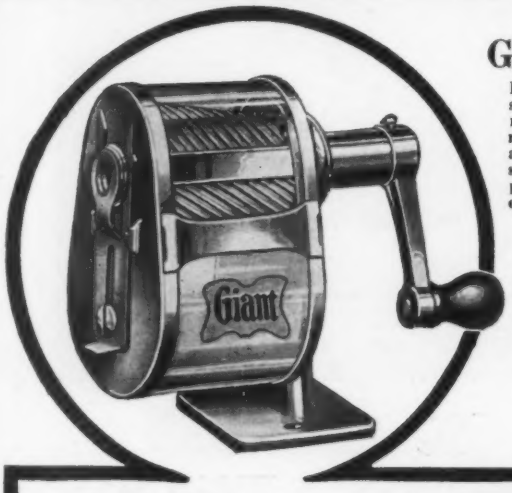


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Made of high test hardened steel, deeply undercut and hollow ground to a razor edge "Apsco" TWIN MILLING CUTTERS will make thousands upon thousands of pencil points before showing any signs of wear.

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AUTHORITIES on kindergarten work see in these amazingly flexible sets of project blocks an ideal tool for child guidance.

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## ASBESTOS CURTAINS
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***Stage scenery for your Auditorium Stage***

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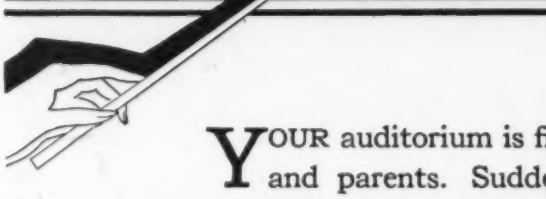
Translate these phrases (They mean a well known safety term.)

l'éclairage au besoin
die Notbeleuchtung
el alumbrado en caso de urgencia



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***Made in the color tone of your choosing***

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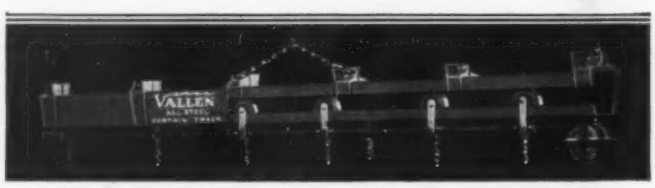


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**VALLEN ELECTRICAL COMPANY, Inc.**
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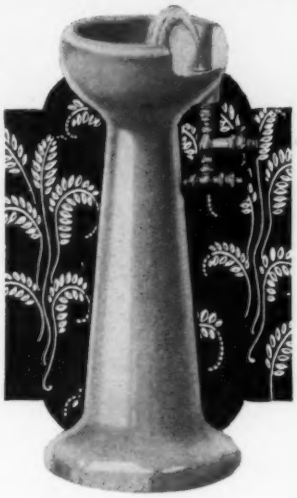

The R-S Vertico-Slant fountain design makes it impossible for the user to touch his or her lips to the nozzle. Water spouts slantingly from jet to mouth, the excess falling into the bowl and not on the jet. Only the R-S fountains have Vertico-Slant health guarding features.

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They assure Perfect Ventilation; Maximum Light and Vision; Absolute Weather Protection; Elimination of Street Noises When Closed; Safety and Economy in Cleaning Exterior of Glass from Inside; Easy Operation; Continuous and Lasting Service; No Depreciation and Minimum Maintenance Costs.

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*VALLEYCO BLACKBOARD*

# NOW!

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Backing of Masonite presdwood; outlasts life of average school building — surface guaranteed 10 years.

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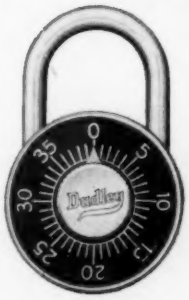


S-2B

The Dudley self-locking keyless padlock (S-2-B) and Dudley self-locking built-in door lock (S-L-2), lock automatically upon closing.

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One glance down the corridor reveals whether or not the lockers are locked. If the locks or locker doors are closed, you know that they are locked.

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SL-2

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Supt. of Schools

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**TUBULAR SLIDE**
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RESPECT for their wholesome ability to do their job day after day without annoying mechanical faults. Respect for their smooth riding qualities, safe operating conditions, freedom from upkeep expenses . . . Sedgwick Dumb Waiters offer no compromise with quality. They are the best hand-operated Dumb Waiters that can be produced under modern factory conditions with a background of 40 years of experience. If you find the cost slightly higher, you will also find the performance vastly superior.

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Stewart Fence has satisfied School Boards for the last 45 years from the standpoints of beauty, service and low cost.

We are low-cost producers of both Wrought Iron and Chain Link Wire Fence. Write for special Bulletin on "Fences for Schools and Playgrounds."

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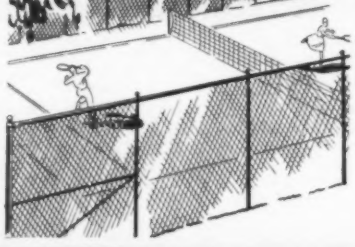
Stewart IRON AND WIRE FENCES



Wherever the waste system must handle any corrosive liquids . . . install

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. . . as permanent insurance against costly leakage . . . Write for full particulars

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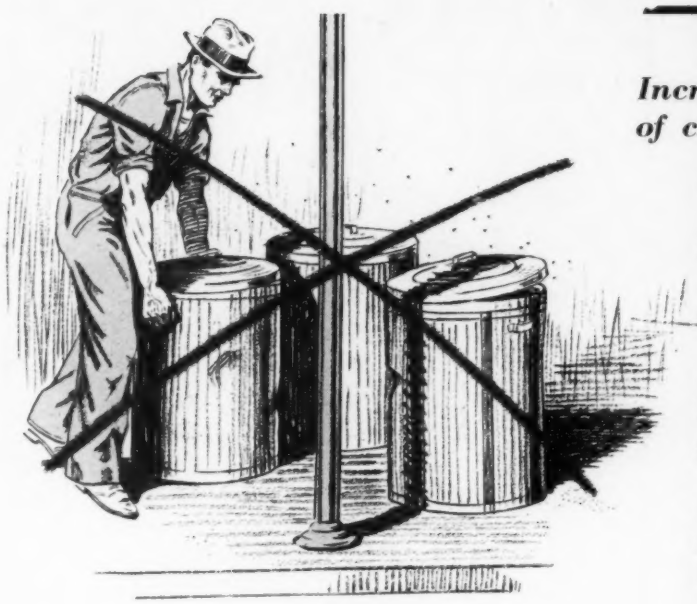

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TODAY'S high standards of sanitation and efficiency *demand* elimination of refuse storage and handling. It is *dangerous* to health and safety . . . it is *wasteful* of space and money.

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It is the only way to meet modern standards of sanitation, of safety — and of efficiency. Send today for complete details.

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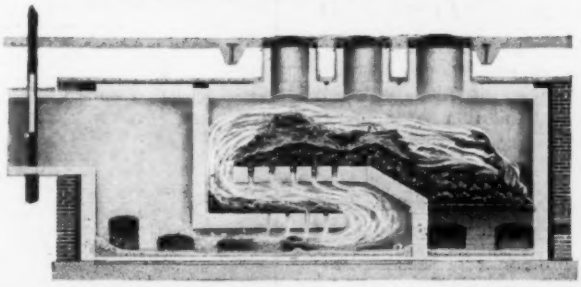
*Competent local representatives for your convenience*

*HEAVY-DUTY INCINERATION*

**MORSE BOULGER DESTRUCTORS**



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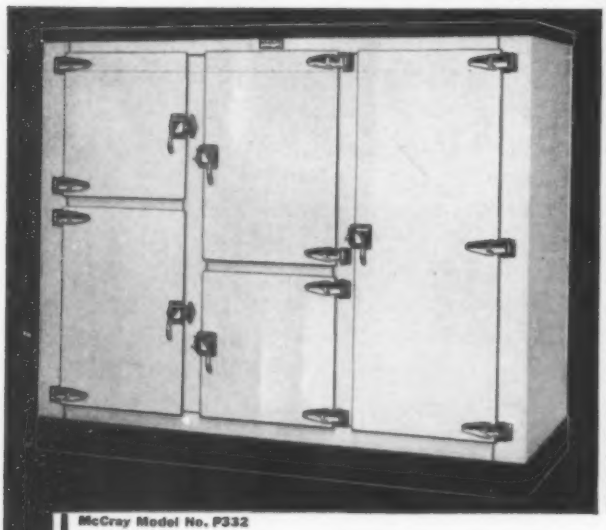
# McCray's 41 Years Experience Means ECONOMICAL OPERATION



McCray Model No. P332

"KNOWING HOW" is the priceless ingredient in any process of manufacture. Into every McCray refrigerator go hidden qualities—the result of 41 years experience—which make a big difference in service—eliminating spoilage, and cutting down operation costs, whether ice or mechanical refrigeration of any type is used.

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Porcelain interior and exterior with pure corkboard insulation are features of a new line of McCrays.

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# *Sometimes* WE *are surprised*

BUT we try not to show it... This time a husband said his wife was arriving in 10 minutes, and could we help him arrange a surprise dinner party for her? Here was a list of 12 guests ... would we telephone them and "fix things up" while he dashed to meet his wife at the station? There were 14 at that dinner ... and his wife *was* really surprised!

It's our belief that a hotel should do *more* than have large, airy rooms, comfortable beds, spacious closets. Beyond that, we daily try to meet the surprise situation *(without surprise)*, no matter what the guest wants.

***Extra service at these 25***

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UNITED HOTELS

# Hundreds of schools have SOLVED this problem

**Sanitation demands the *modern* method of waste disposal—INCINERATION. Kernerator has successfully met this demand in hundreds of schools, is "paying its way" by eliminating the cost of hauling away rubbish and garbage from cafeteria or lunchroom.**

**Hopper doors, conveniently located on each floor, receive all waste—papers, sweepings, wilted flowers, garbage from cafeteria or lunchroom, sanitary napkins, paper towels and other washroom debris—no storage, no transportation. The material drops down the flue to the incinerator chamber in the basement. There it is destroyed by burning. Non-combustibles—tins, bottles, crockery—are flame-sterilized and removed with the ashes. The air-dried waste furnishes the fuel for its own destruction—no cost for commercial fuel.**

**Kernerator may be installed in both new and existing schools.**

*Consult your architect and write for booklet, "The School Problem of Waste Disposal Solved," with names of schools using the Kernerator.*

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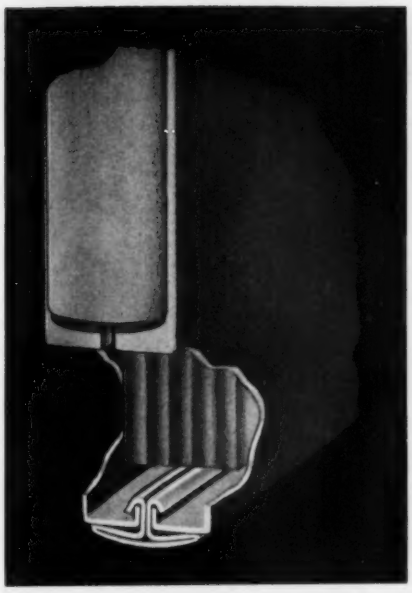

# *Durability* in Flush Partitions

Although obvious considerations for flush partitions for toilet rooms involve appearance and sanitation, school authorities should not overlook the question of durability when they select partitions of this type. Flush Weisteel partitions not only afford a pleasing rectangular design and the utmost in sanitation, but because of their unique design and patented construction, possess the stamina necessary for long service under strenuous conditions.

The illustration above indicates the construction used in Flush Weisteel. Note that the two sides of the section illustrated are *gripped all the way around* by the curved moulding strip. This gives a rigid construction which cannot weave or bend. The filler material is securely cemented under high pressure to the sides of the metal sheets thereby assuring a substantial rattle-proof and solid result.

We shall be glad to send you full information about Flush Weisteel and its application to problems in the school field.

HENRY WEIS MFG. CO., INC.
ELKHART (*Established 1876*) INDIANA

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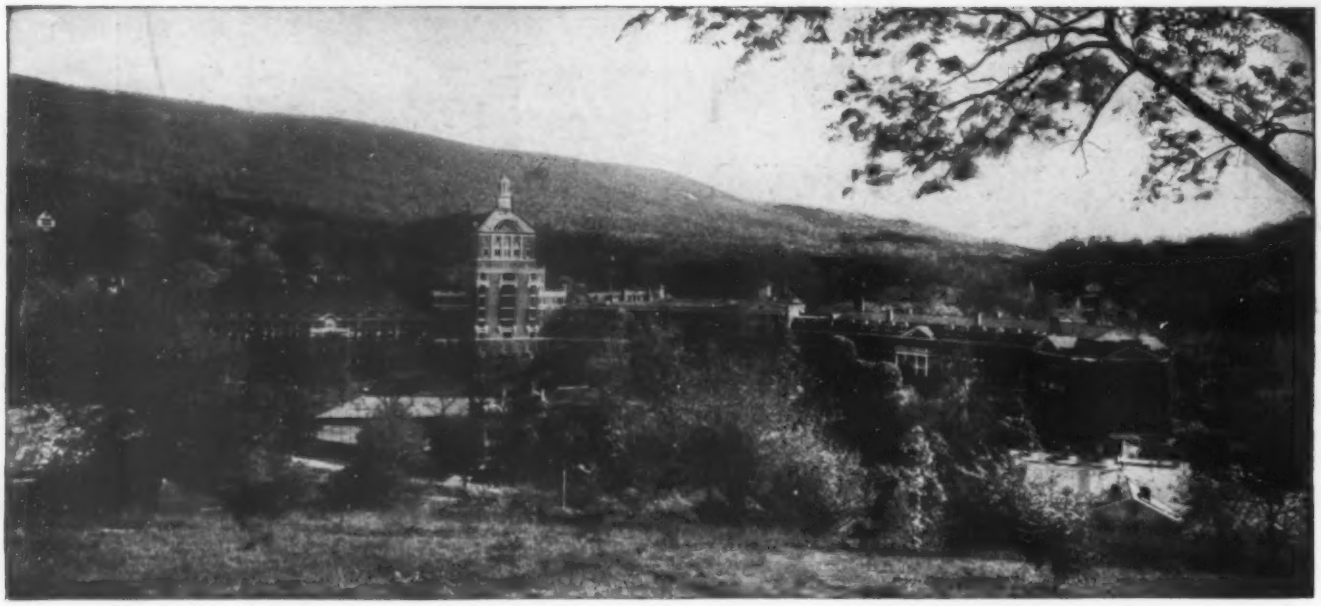
WEISTEEL



# *The Psychology of Convalescence*

IT is the opinion of many prominent physicians and hospital administrators that convalescing patients should leave the hospital as soon as possible, and receive the benefits of a few weeks at a health resort, before resuming commercial, professional, or social duties. The psychological benefit of this procedure is of enormous advantage to the patient.

The HOMESTEAD, Hot Springs, Va., offers an ideal service to convalescing patients who are in need of post-hospital treatment and "conditioning." At these Springs patients can receive all the medical attention that may be required. Here are provided all approved forms of Hydrotherapy, Solarium, Zander Institute, Diet Kitchen — in fact, every facility for recuperation that is to be found in the best of European Spas. The Calcic Carbonate, Magnesia Carbonate, and Sulphate Springs located here are all radioactive. The springs emanate from the ground at a temperature of 106 degrees.

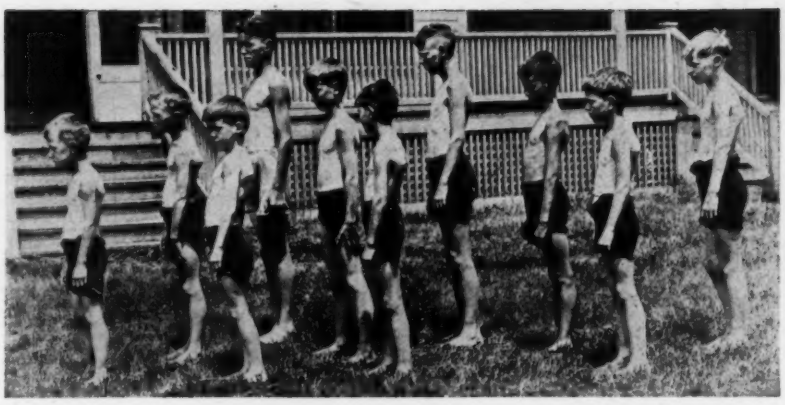
The HOMESTEAD, in its appointments and service, will meet all expectations. The climate is unsurpassed and the mountain scenery is magnificent, with splendid opportunities for golf, horseback riding, etc. In addition to these is the companionship of those who are in full health or on the road to recovery — in short, Hot Springs, Va., presents the right combination of psychological and physiological factors essential to speedy recovery of health and efficiency.

*Hospital officials and physicians are cordially invited to correspond with our Resident Manager for more detailed information. Write for the beautiful illustrated book, "Virginia Hot Springs," and the booklets on "The Cure at Hot Springs, Va.," "A comparison of the Hydrotherapeutic Methods at Aix-Les-Bains and Virginia Hot Springs," and "The Radio-Activity of the Mineral Waters of Hot Springs, Warm Springs and Healing Springs in Hot Springs, Va." The information in these booklets will be valuable to you.*

## THE HOMESTEAD

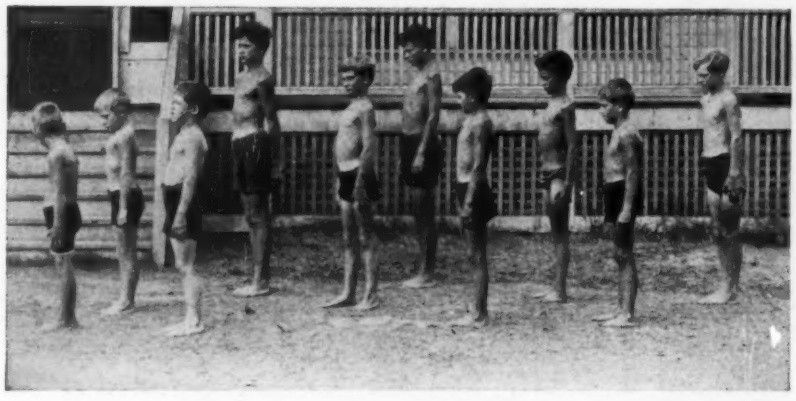
**Christian S. Andersen,** ***Resident Manager*** **HOT SPRINGS, VA.**

**Booking Offices:** The RITZ-CARLTON HOTEL, New York City The RITZ-CARLTON HOTEL, Philadelphia



*A group of boys at the Lowell, Mass., Summer Camp for Underweights. Taken on first day at camp, July 1, 1928. Note listless attitude, poor posture, and general condition*

# How one City BUILT UP *its Undernourished School Children*



*The same group eight weeks later, August 26. Seven pounds heavier, sun-tanned, alert, and in good condition to begin the school year*

***Read what was accomplished in just two months in a Municipal Summer Camp***

LOWELL, one of the most important manufacturing cities of New England, set a record when it took up the fight against undernourishment among its school children. Nutrition was an important factor in the marked improvement of the three hundred children cared for, and bananas and milk a regular item of their daily diet.

In an article published in the American Journal of Public Health, June, 1929, Dr. J. J. McNamara, School Physician of Lowell, said:

"Milk and bananas were chosen as a supplementary lunch . . . because they furnish a complete food when used together . . . also because the ripe banana is palatable and easily digested and assimilated. The combination also contains adequate amounts of vitamins A, B and C and the essential mineral salts. This choice of a milk and banana diet was due not only to its adequacy as a supplementary lunch for those children who were in special need of extra nourishment, but also to create a taste for a palatable food which might replace concentrated carbohydrates in the form of candy, or other sweets, between meals."

This article, comprising 16 pages, with good, clear photographic illustrations, has been reprinted and will be mailed on receipt of attached coupon.

It is of vital interest to all concerned in Child Health—now recognized as the most important branch of Public Health Service. Send for your copy.

UNITED FRUIT COMPANY N. S. 5-31
Educational Department
Federal Street, Boston, Mass.

Please send me a reprint of Dr. McNamara's article, "Lowell Fights Undernourishment Among its School Children."

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TOM A SABREY, Manager

655 COMFORTABLE ROOMS
ALL WITH BATH
GARAGE FACILITIES • RATES STARTING AT $2.50


**STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912**

Of The Nation's Schools, published monthly at Chicago, Illinois, for April 1, 1931.

State of Illinois } ss.
County of Cook }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared James G. Jarrett, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The Nation's Schools Publishing Co., and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:

Publisher: The Nation's Schools Publishing Co., Chicago, Illinois.

Editor: Prof. M. V. O'Shea, Madison, Wisconsin.

Managing Editor: John A. McNamara, Chicago, Illinois.

Business Manager: James G. Jarrett, Chicago, Illinois.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The Nation's Schools Publishing Company is owned by the Modern Hospital Publishing Company, Inc., Chicago, Illinois. The stock of the Modern Hospital Publishing Company, Inc., being owned by:

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J. G. JARRETT, Business Manager.

Sworn to and subscribed before me this 31st day of March, 1931.

[ SEAL ] J. P. McDERMOTT, Notary Public.

My commission expires August 10, 1933.


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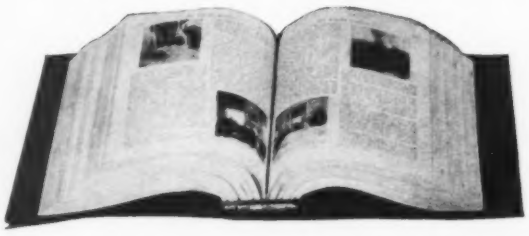

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*The new Washington High School, Lorain, Ohio, painted throughout with Barreled Sunlight.*

# Their Business Manager chose interior paint in a *businesslike way*

THE Board of Education at Lorain, Ohio, had a new high school to paint. So they secured samples of eight "standard makes" of interior paint. Tested them. And chose Barreled Sunlight.

"Tests were made," they say, "for hiding qualities, covering power and ease of application."

True enough, Barreled Sunlight does spread over a larger area, has greater hiding power, is easy to apply. But, in the opinion of many users, that's a secondary consideration.

Marked resistance to dirt . . . a high degree of light reflection . . . ease of washing . . . these are the characteristics that explain Barreled Sunlight's widespread popularity.

U. S. Gutta Percha Paint Co., Providence, R. I. Branches or distributors in all principal cities. (For the Pacific Coast, W. P. Fuller & Co.)

BOARD OF EDUCATION
BUSINESS DEPARTMENT
LORAIN, OHIO

W. A. PILLANS
BUSINESS MANAGER

REPLYING TO

SUBJECT

DATE November 15, 1929

U. S. Gutta Percha Paint Co.
Providence, R. I.

Gentlemen:

After testing eight standard makes of interior wall paint, we chose Barreled Sunlight for our High School.

Tests were made for hiding qualities, covering capacity and ease of application.

We are highly pleased with the results obtained.

Very truly yours

W. A. Pillans.

Business Manager

WAP:MP

# Barreled Sunlight

Reg. U. S. Pat. Off.

*Easy to Tint*

Any desired shade is obtained by simply mixing ordinary colors in oil with Barreled Sunlight white. Quantities of five gallons or over are tinted to order at the factory without extra charge.

U. S. GUTTA PERCHA PAINT CO.
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Please send us further information and a panel painted with Barreled Sunlight. We are interested in the finish checked here.

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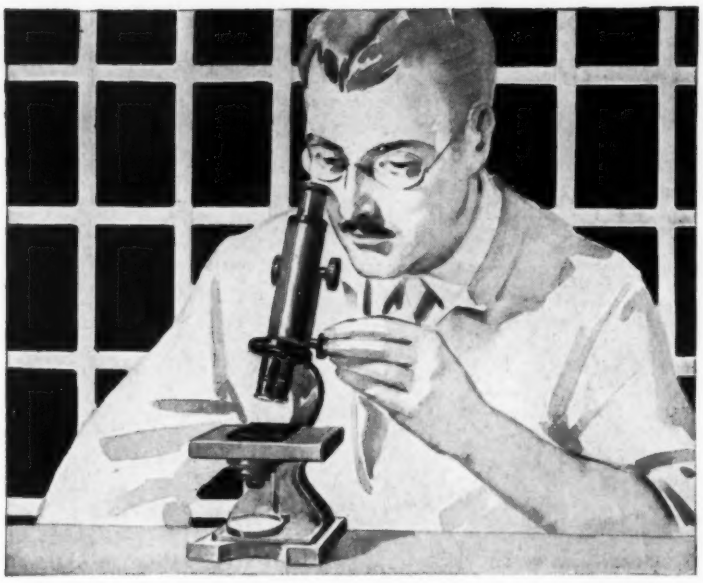

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## *a man-made blackboard to meet man's needs!*

WHENEVER man has attempted to produce a commodity to better serve his own needs, he has built into that product only those qualities that definitely contribute to its usefulness and efficiency. All other factors are eliminated.

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This is the underlying principle in the production of *Sterling Lifelong Blackboard.* For, it possesses no qualities that do not make it more useful and efficient in the schoolroom. It is free from blemishes, irregularities and natural defects.

*Sterling* is recognized as another triumph of science—the product of our laboratories after years of exhaustive research — a permanent blackboard body, uniform and durable, with a better writing surface that only malice can deface.

For 47 years this institution has faithfully endeavored to make its contribution to educational progress. And our pledge of satisfaction stands behind every foot of *Sterling* Lifelong Blackboard. For schools in which quality and permanence are of first importance—*Sterling* is *the* Blackboard to install.

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THOSE educators who seek attractiveness, flexibility, and efficiency in the classroom will approve this modern desk set by Heywood-Wakefield. It is an all wood desk set similar in design to the type which many pupils will use upon entering business careers; a desk that permits flexible seating arrangements and one which assures easy and thorough sweeping and cleaning of the classroom.

It is strong, rigid, and comfortable. The posture type of chair has a properly curved and pitched back and a deep, supporting saddle type seat. This furniture is available in a wide range of sizes, too. Consequently, it is comparatively simple to obtain a uniform, business-like appearance throughout the entire school building.

The Heywood-Wakefield Table Desk Set is built of sturdy stock; is well braced all around; and is entirely capable of withstanding the severe usage which schoolroom equipment is sure to receive. The specially designed bentwood braces add extra strength, yet are so placed that they do not interfere with the pupil's feet. Before selecting any classroom equipment, be sure to investigate this and other practical styles of Heywood-Wakefield School Furniture. A note to the nearest sales office listed below will bring you complete information.

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